

**Testimony from the Dead: Examining the Use of Autopsies as a Means of
Investigating Suspicious Death in Early Modern England**

Pascale Halliday

Bachelor of Arts in Humanities

March 2021

Table of Contents

<i>Introduction</i>	1
<i>High Profile Autopsies</i>	4
<i>The Circumstances of Autopsy</i>	7
<i>Autopsies in Cases of Poisoning</i>	21
<i>The Medical Examiner</i>	24
<i>The Autopsy Procedure</i>	27
<i>The Use of Autopsy Evidence in Court</i>	32
<i>Forensic knowledge</i>	39
<i>Conclusion</i>	42
<i>Bibliography</i>	45

Figures

Figure 1	9
Figure 2	10

Introduction

On the evening of the 7th of November 1612, physicians and courtiers of the English court gathered around as Théodore de Mayerne opened the body that lay on the bed. The corpse in front of them was Henry Stuart, son and heir of King James I. The Prince of Wales' sudden illness and death at age of eighteen shocked Europe and sparked rumours of poisoning, with some levelling accusations at the king himself. As the Venetian ambassador to Savoy noted, "In France they held that the Prince of Wales died of poison, and what is worse is that some hold that his father was an accomplice in the murder".¹ An autopsy was performed the day after the young prince's death, in which it was discovered that Henry's lungs were "almost all blacke, in the greatest part thereof, the rest being marked with blacke, puft up and full of a parched blood, and of a corrupt bloody serosity".² Although the autopsy did not completely quell rumours that the king had arranged the poisoning of his well-loved son, de Mayerne's conclusion that the prince had died of natural causes went a long way to stabilizing public opinion and preventing official accusations from being made. While the current royal policy on exhumations precludes the opportunity to confirm this today, an analysis of contemporary observations and medical notes performed by Sir Norman Moore in 1881 suggested the young prince died of typhoid, supporting de Mayerne's original diagnosis.³

¹ Quoted by Eleanor Herman, *The royal art of poison: fatal cosmetics, deadly medicines, and murder most foul* (London: Duckworth, 2019), 179.

² W. H., fl. *The True Picture and Relation of Prince Henry* (1634). Unless otherwise stated, primary printed sources are published in London

³ Norman Moore and G. W. Prothero, *The Illness and Death of Henry Prince of Wales in 1612: a Historical Case of Typhoid Fever* (London: J.E. Adlard, 1882).

While Henry Stuart's death was shocking, the choice to perform an autopsy was not as unusual as it may initially appear. A survey of royal deaths during this period reveals that it was not out of the ordinary for the bodies of deceased royalty to be opened and examined. In many cases, this dissection was part of the exhumation process in order to preserve the royal body, but if there were any rumours concerning possible foul play, autopsies were used by early modern authorities in order to shed light upon the cause of the monarch's death. Both Edward VI⁴ and James VI & I⁵ were autopsied after their deaths, illustrating that the value of the procedure was understood by many elites during this era. In addition, autopsies were not limited to cases of suspected assassination. Although today associated with the modern field of forensic pathology, autopsies were performed in England throughout the early modern era in order to investigate suspicious deaths, from high-profile cases of suspected poisoning to fist fights in pubs. Scholars of early modern continental Europe have long researched the use of autopsy in criminal trials but similar analysis is still necessary in the case of England. While England did not require medical evidence to be gathered in cases of suspected murder, as many continental European countries did, this does not indicate that medical evidence was not a part of the English criminal law system at this point. Although previous works have suggested that autopsies were barely performed in England during the early modern era, with one historian writing that records of autopsies prior to 1770 were "are almost as rare as sesquicentenaries",⁶ an examination of contemporary trial accounts and other primary sources indicates that, although autopsies were

⁴ Grace Holmes, Frederick Holmes, and Julia McMorrough, "The Death of Young King Edward VI," *New England Journal of Medicine* 345, no. 1 (May 2001): pp. 60-62,

⁵ Alastair Bellany and Thomas Cogswell, *The Murder of King James I* (New Haven, Conn: Yale University Press, 2015).

⁶ T.R Forbes, "Percivall Pott Performs a Postmortem," *Bulletin of the New York Academy of Medicine* 51, no. 2 (1975): pp. 272-276.

not performed as frequently as they would be in following decades, they were performed with some regularity and were clearly an oft-utilized and appreciated tool.⁷ While the difficulty in accessing many records renders it difficult to make a complete quantitative argument concerning the number of autopsies performed in England during this period, the examination of contemporary pamphlets, trials accounts and other printed sources provides enough information to suggest that the use of autopsies in England during the early modern era was more prevalent and accepted amongst both the medico-legal community and the English public than previously thought.

This thesis thus challenges some misconceptions surrounding the use of autopsy as a means of investigating suspicious deaths in England during the early modern era, such as the idea that autopsies were performed only on the bodies of the elite or the suggestion that English medical practitioners were totally isolated from the scientific developments of Scotland and the continent. In addition, this paper explores the use of the autopsy in criminal trials, utilizing primary resources including *The Old Bailey Sessions Papers*, the Ordinary of Newgate's *Account*, and contemporary pamphlets describing high-profile deaths. The transcription and digitization of the Old Bailey sessions papers and the *Ordinary's Account* has facilitated research into the use of autopsy procedures in the early modern English court, including the tabulation and statistical analysis of this data. Utilizing a sample of over 1400 murder trials held at the Old Bailey courthouse between 1680 and 1780, it is possible to discern trends in the use of autopsy throughout this era, challenging previous notions concerning early modern forensic science in England and illustrating the growing influence of the medical expert witness over the course of

⁷ K.J. Kesselring. 2019. *Making Murder Public: Homicide in Early Modern England, 1480-1680* (Oxford: Oxford University Press, DATE?).

this period. In addition, these primary sources allow insight into when autopsies were used in English criminal trials, how they were performed, and how they were perceived by the medical community and the general public during the early modern era. This thesis maps the use of autopsies in England throughout the early modern era, suggesting the autopsy functioned as one of the earliest forms of scientific evidence available to early modern jurors in both coroner's inquisitions and murder trials. The examination of autopsy use in early modern England also provides interesting insights concerning the growth and professionalization of the medical community, as well as the shift occurring in the English courtroom from reliance upon character or witness testimony to more modern evidence-based procedure.

ii. High Profile Autopsies

Although autopsies in early modern England were not restricted to the bodies of the wealthy and powerful, the operations performed on such figures not only illustrate the official acceptance of the practice, provide us with published detailed notes which are now powerful tools to understand the exact nature of the procedure at this time. In addition, the fact that many of these autopsy descriptions were published in English indicates a desire for information to be disseminated beyond the medical and legal community, suggesting that the reporting of autopsies might have fulfilled a political function. These high-profile autopsies acted as political tools either to dismiss or confirm speculation following deaths that had potential geo-political implications. Throughout the early modern era, the ever-present fear of poisoning was no doubt aggravated by several high-profile poisoning cases, such as the widely-publicized French Affair of the Poisons from 1677 to 1682. Suspicions of poison often that followed the deaths of important persons in England during this time, prompting authorities both to perform autopsies and, in some cases, to publish the findings of these autopsies to combat rumours of conspiracy

and murder, such as in the case of Sir Thomas Overbury, explored elsewhere in this paper. In this way, the autopsy was a tool not only for surgeons but for those in power, either to reassure allies that death was natural or to prove that a murder had been committed. Thus autopsies could be politically necessary, especially during times of political instability.⁸

In 1571, the French aristocrat Odet de Coligny died a painful death in Canterbury, sparking rumours that de Coligny, a former Catholic priest who had converted to Calvinism, had been poisoned by a French Catholic faction. Elizabeth I ordered a committee to investigate the death, calling for a complete autopsy. The report from this committee survives in full, describing the procedure and the committee's conclusion: that de Coligny had been poisoned by an unknown person. The autopsy had found that de Coligny's stomach was "fretted and pierced through in such a wise as belongeth not to the inflammation of a fever, but rather the operation of a poison."⁹ Elizabeth I's decision to order an autopsy not only contradicts the notion that autopsies were abhorrent to the religious sensibilities of the era, but illustrates the use of the autopsy as a powerful and political tool. In this case, English medical professionals were ordered to perform an autopsy upon a foreign national on English soil, but there is also evidence of such professionals going abroad to perform and supervise autopsies on behalf of the English crown. Following the sudden death of Charles II's sister Henrietta Anne at the French royal court, two English medical professionals were ordered to France to aid in performing her autopsy. The autopsy was performed in a large part to reassure Charles II that his beloved sister, who had only recently travelled to England to aid in the negotiations of Secret Treaty of Dover, had died of

⁸ Bellany and Cogswell, *The Murder of King James I*

⁹ Ernest G Atkinson, *The Cardinal of Châtillon in England, 1568–1571 : a paper read on 13 November 1889, before the Huguenot society of London* [Proceedings of the Huguenot Society of London](#) Volume 3. (Huguenot Society of London. 1892). pp. 172–285, 251

natural causes and not been the victim of a murder plot. Hugh Chamberlain and Alexander Boscher performed the operation alongside French doctors and produced a joint report concluding that Henrietta Anne had died of natural causes.¹⁰ The delicacy with which the autopsy was handled illustrates the way that post-mortem examinations could ease geopolitical tensions and control the rumour mill of the royal courts of Europe.

The use of autopsy as a response to public speculation was not limited to royal authorities in England. Autopsies continued to be ordered during the Commonwealth and Protectorate, most notably the opening of the body of Miles Sindercombe, convicted in February 1657 for attempting to assassinate Oliver Cromwell. The night before Sindercombe was to be executed for treason, he was found dead in his cell in the Tower of London. An autopsy was performed as part of a coroner's inquest following the death, which revealed that Sindercombe's brain to be "much inflamed, red, and distended with blood".¹¹ The surgeons who performed the autopsy concluded "that the said prisoner had caused the same by some extraordinary means, for the hastening of his death"¹². This finding of suicide by poisoning allowed authorities to question Sindercombe's jailers and his family. While Sindercombe's suicide may have been frustrating for authorities, the autopsy of Sindercombe's corpse provided an official explanation of his death, reducing the opportunity for speculation.

The publication of these autopsies reveals the way that post-mortem examinations could be used to preempt speculation and gossip, suggesting that autopsies could be used as a tool to stabilize communities following the shock of a sudden death. These much-publicized autopsies

¹⁰ Holly Tucker, *City of Light, City of Poison: Murder, Magic, and the First Police Chief of Paris* (New York: W.W. Norton & Company, 2018), 75.

¹¹ *The Whole Business of Sindercome, from First to Last*, 1657

¹² *The Whole Business of Sindercome, from First to Last*, 14

did not only serve as tools for the elite to control narratives, but also familiarized the public with the procedure and publicly illustrated its use. David Harley has suggested that the high profile autopsies of the 16th and 17th century made the procedure and its uses more familiar to the English public, making them more likely to accept autopsies in more mundane cases of suspicious deaths. “Several highly controversial autopsies, conducted on royalty and politicians, publicized the procedure and helped to make it socially acceptable.”¹³ In each of these cases, the autopsy as a procedure was depicted as a useful and efficient tool that could be used to uncover information that benefitted the rightful party, contradicting the narrative that the English did not appreciate the benefits of the autopsy during the early modern era. While the use of the autopsy by and on figures in positions of power illustrates the acceptance of the practice, its use was not limited to the elite. Sources such as the *Old Bailey Proceedings* allow us to examine the use of autopsy in criminal trials, giving insight into how just how often autopsies were used and how they were perceived by the ordinary public.

iii. The Circumstances of Autopsy

As previously mentioned, the English legal code did not require coroners to seek medical evaluation in cases of suspicious death, leading some to surmise that English coroners and judges did not make use of the procedure when evaluating suspicious deaths. However, scholars such as Krista Kesselring have suggested that this assumption is in part due to the nature of the surviving records, and that the lack of a comprehensive record of autopsies performed does not

¹³ David Harley, “Political post-mortems and morbid anatomy in seventeenth-century England.” *Social history of medicine : the journal of the Society for the Social History of Medicine*, 7(1),(1994) pp.1–28

necessarily mean that they weren't performed.¹⁴ According to Carol Loar, "post-mortem examinations and autopsies occurred more frequently than the official records reveal, and examples of coroners' inquests relying on autopsies date at least to 1591, if not earlier—although their presence is not often noted in the official records of the inquest."¹⁵ The records of early modern coroner's inquests tend towards efficiency rather than exhaustiveness, and the *Old Bailey Sessions Papers*, while an invaluable resource, did not provide highly detailed reporting until the late 1770s.¹⁶ These publications did not aim to record the use of autopsy, and thus can be inadvertently misleading in their depiction of the procedure's use. However, the examination of contemporary sources, especially the *Old Bailey Sessions Papers*, reveals evidence of autopsies appearing both more often and earlier than often thought and suggests that they increased in use throughout the period.

In order to determine this however, historians must read trial transcripts closely, as early modern medical experts did not often use the term autopsy, referring to the operation as the "opening" or the "examination" of the body. In some cases, the medical expert refers to "probing" the body, and it is unclear whether such probing included an invasive surgical procedure into the body. This indistinction of language can render it difficult to distinguish between a full autopsy and a superficial examination. Therefore, for the purposes of this research, cases have only been used when it is clear from the testimony that an autopsy was performed, usually due to the fact that the medical experts are able to testify as to the weight,

¹⁴ Krista Kesselring. "Detecting 'Death Disguised': Krista Kesselring Describes how Coroners in the Early Modern Period Tried to Establish the Cause of Death in Disputed Cases." *History Today* 56, no. 4 (2006): 20.

¹⁵ Carol Loar, "Medical Knowledge and the Early Modern English Coroner's Inquest", *Social History of Medicine*, Volume 23, Issue 3, (December 2010), 475–491,489

¹⁶ Simon Devereaux, "From Sessions to Newspaper? Criminal Trial Reporting, the Nature of Crime, and the London Press, 1770–1800," *The London Journal* 32, no. 1 (2007): pp. 1-27

colour, and state of interior organs, information that could only have been gathered from an invasive post-mortem examination. In addition, a distinction has been made between the dissection of a corpse for non-investigative purposes, such as embalming, and a post-mortem examination performed as part of an investigation.

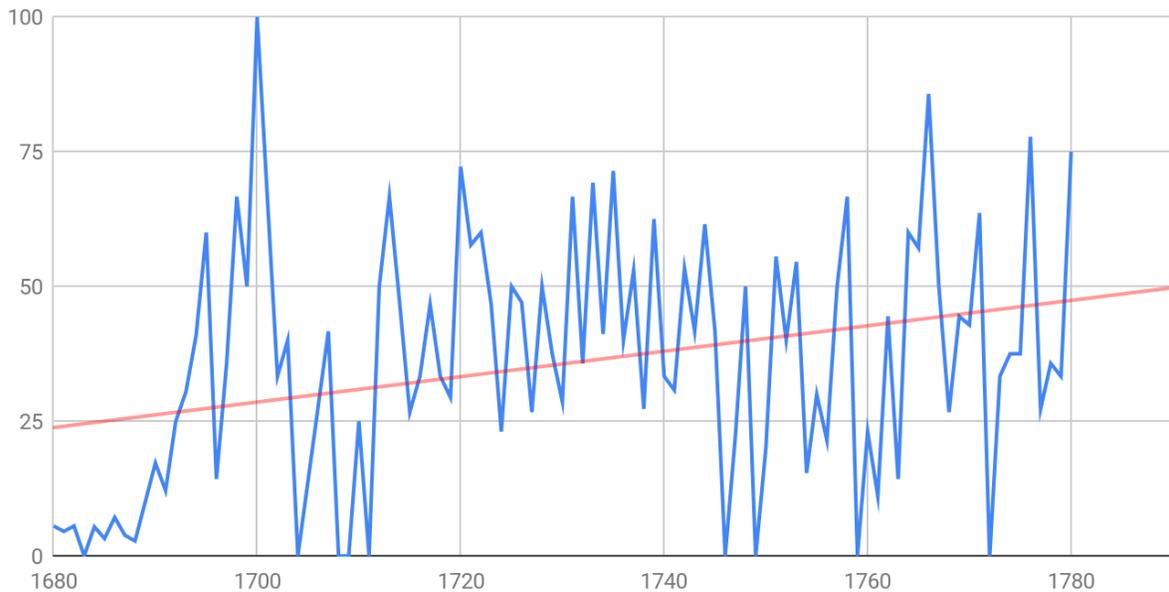


Figure 1

Figure 1 illustrates the percentage of murder cases recorded in the *Old Bailey Sessions Papers* between 1680 to 1780 that mention that an autopsy was performed. This data records cases in which an autopsy was explicitly mentioned and used as evidence in a murder trial, as a percentage of total murder cases tried. (Again, the lack of autopsy evidence presented at trial does not necessarily mean that an autopsy was not performed; it is possible that an autopsy was performed and not recorded). This data was pulled from the *Sessions Papers* and the Ordinary of Newgate's *Accounts*, and the mention of autopsies in these published documents indicate that, in

these cases, the autopsy was considered to have had a notable impact. As Figure 1 shows, the percentage of murder cases in the *Old Bailey Sessions Papers* that mention autopsies rose throughout this period. Although it is not possible to make a definite quantitative argument concerning the number of autopsies actually performed during murder trials during this period, this increase in reporting suggests the growing public knowledge of autopsies and the use of medical evidence. In addition, this growth is suggestive of changing perceptions of homicide, which some historians have suggested became a more ‘public’ matter during this period.¹⁷ The rise in reporting of autopsies suggests that the investigation of a suspected murder, including autopsies performed as part of this process, were a matter of public interest.¹⁸ These reports concerning murder trials of early modern England enable us to examine the use of autopsy in different types of murder trials, revealing trends concerning the perceived use of autopsies. Figure 2 examines the use of autopsy in the sample, divided by the method of murder. While the use of autopsy in English criminal trials rose in nearly every category during this period, the nature and goal of the autopsy differed, and the individual study of these statistics allows valuable insight into the early modern English understanding of the autopsy and what insight it

¹⁷ Kesselring, K. J. *Making Murder Public: Homicide in Early Modern England, 1480-1680*. First ed. Oxford: Oxford University Press, 2019.

¹⁸ Kesselring, *Making Murder Public*

could provide into a suspicious death.

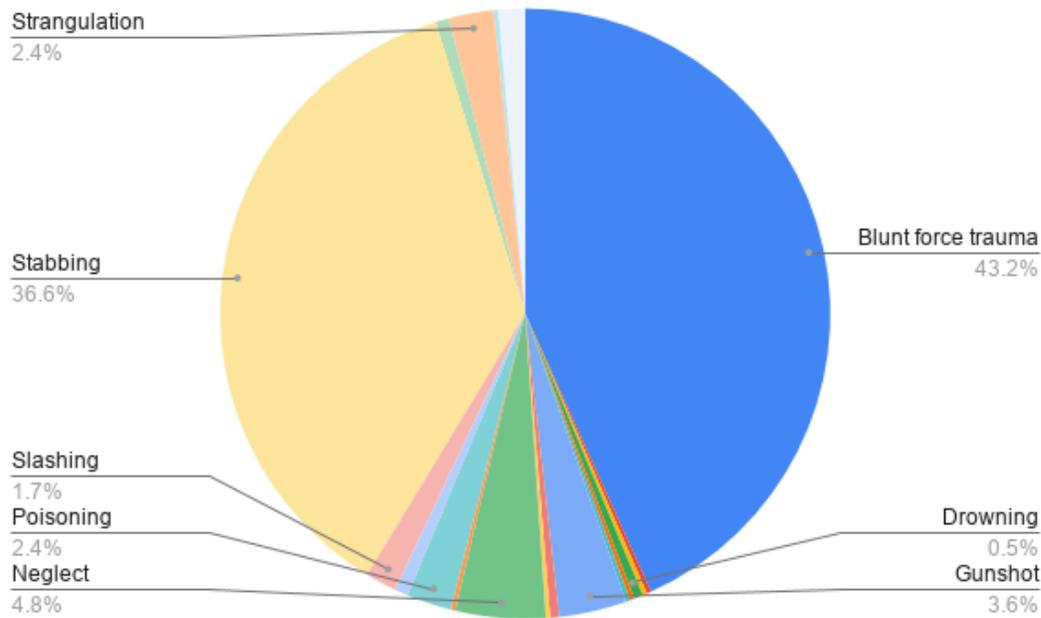


Figure 2

Of the sample consisting of the murder cases reported *Old Bailey Sessions Papers* between 1680 and 1780, roughly 31% involved murder by blunt force trauma. However, autopsies performed in murder trials involving blunt force trauma represent around 43% of all autopsies included in the sample. One of the most common forms of murder in England during the early modern era, these trials usually focused not on whether the accused had inflicted the injury, but whether the act had actually caused the death of the victim, creating a need for autopsies. After Joseph Everet died in 1730 the day after a pub brawl, the man he had fought was charged with his murder. An autopsy performed on the body, as ordered by the deceased's son, found that Everet had died of natural causes, not as a result of wounds received during the fighting. The medical expert witness testified that "he saw nothing in the Body that as he thought might cause any Symptoms of

Death, and he did believe he died a natural Death.”¹⁹ Everet’s case illustrates one of the forms of medical evidence expected from expert witnesses in cases of suspected murder by blunt force trauma.

While the function of the autopsy is to gather information surrounding the death of an individual, examination of early modern trial transcripts reveals that, by the mid eighteenth century, their purpose had expanded. Autopsies were performed in many cases where the cause of death had already been determined, such as in cases of stabbing or gun violence. In these cases, surgeons performed autopsies not to determine the reason for death, but to gather information such as the depth of the wound. Many autopsies following stabbing or gun violence were performed by a surgeon who had been called to treat the deceased but arrived too late. That an autopsy was performed despite there being clear proof of the cause of death is indicative of the growing normality of the procedure in England, as well as the possible desire on the part of surgeons to perform anatomical examinations. In many of these cases, the surgeon performed the autopsy immediately upon arriving on the scene of the crime and presented the evidence at the coroner’s inquest, suggesting an understanding between parish surgeons and the coroner of the procedure to be followed in cases of suspected murder. In these cases, we can see the evolution of the reporting of autopsies during this period from the depiction of the procedure as one used in mysterious or high-profile murders to the reporting of autopsies as routine procedures performed after violent deaths to gather as much information as possible.

In 1723, Charles Weaver was tried for stabbing Eleanor Clark during a conflict over wages. After the stabbing, a surgeon was called to treat Clark’s wound but arrived too late. “The

¹⁹ *Old Bailey Proceedings Online (OBP)* (www.oldbaileyonline.org, version 8.0, 21 February 2021), February 1731, trial of William Shaw (t17310224-42).

Surgeon depos'd, that he hearing of the Accident, went immediately to the deceased, into the Boat, but found she was dead; but afterwards examining the Wound, found that it had pierced through the Intercostal Muscles, and through both Lobes of the Lungs, and was the Cause of her Death.”²⁰ In this case, multiple people had witnessed the stabbing so there was no need for an autopsy to determine that Clark had died immediately following the attack. That an autopsy was performed anyway indicates a justice system interested in accumulating as much information as possible, and the inclusion of the autopsy in the published report of the case indicates this scientific evidence. In many court records it is clear to see the interest many both within and outside the medical profession had in the autopsy as a means of satisfying curiosity or ensuring a full understanding of a situation.

Although it is rare that surgeons mentioned explicitly who ordered the autopsy, a close reading of court records suggests that autopsies were typically performed on the order of a coroner, or, in cases where the autopsy was performed prior to the death being reported to the coroner, the evidence was considered to be part of the coroner’s inquest into the death. The lack of official regulation of forensic science in early modern England has led some to conclude that post-mortem examinations were not a major part of the judicial system. Unlike many European countries and Scotland, the English legal system during this era had no requirements for medical testimony in cases of suspicious death. However, there is abundant evidence that medical expertise, including autopsies, were not only ordered by English coroners regularly, but were valued highly by officials and laypeople alike, a sentiment that Loar has observed in the rationalization of juries offered of their verdicts. “Coroner's juries commonly considered such evidence; when their verdicts were challenged, they regularly cited that evidence in support of

²⁰*OBP*, January 1723, trial of Charles Weaver (t17230116-6).

their decisions.”²¹ The English system of investigating suspicious deaths also allowed for more participation on the part of laypeople, creating an environment in which ordinary people would learn about the use of autopsy firsthand, sometimes even observing the autopsy themselves, and hence “reflected the dissemination of medical knowledge among a wider public than critics of the English system generally recognise.”²² During the coroner’s inquest, the autopsy was regularly performed in front of the coroner and the coroner’s jury. The communal nature of the English coroner’s inquest, usually performed in a public place such as a village pub, also created the environment in which medical witnesses could offer their expertise if they felt it would be of aid. After the death of John Pike in 1738, a coroner’s inquest determined that the death had been due to natural causes. A surgeon and apothecary visited the pub where the inquest was being held, and challenged the verdict, offering his services as a medical expert: “The Night the Coroner's Inquest sat upon the Body of the Deceased, I went in and call'd for half a Pint of Two-penny. Hearing the Jury had brought in their Verdict-Natural Death, I desir'd to see the Body, and upon searching the Head, I found a Wound, and a Caedes on the left Side of the Sagittal Suture.”²³ The actions of this surgeon illustrates how the English system, while it had no official requirement for autopsies to be performed, allowed discretion on the part of medical experts, and encouraged the use of autopsies in a way that has been previously ignored. In addition, the use of autopsy as coroner’s inquisition suggests further public approval of the autopsy, as the coroner’s inquisition was a community institution and responded to the needs of the community it served.

²¹ Loar, “Medical Knowledge and the Early Modern English Coroner's Inquest”, 476

²² Loar, “Medical Knowledge and the Early Modern English Coroner's Inquest”, 476

²³ *OBP*, June 1738, trial of Godfrey Walker (t17380628-16).

In many cases, the ordering of an autopsy was initiated by pressure from the community or anonymous reports, especially in the seventeenth and early eighteenth century. In 1731, surgeon Mr. Middleton opened the body of Daniel Hickson “At the Desire of some Persons”.²⁴ Mr. Middleton does not elaborate on who these people were, but their sentiment clearly influenced the choice to perform an autopsy. At other times, an autopsy was ordered not by a court official, but by a private citizen willing to pay for one. In the trial of Jane Sibson, her late husband’s brother bid a surgeon to perform an autopsy: “he said he was determined to have him opened let it cost him what it will, if he begg'd his bread.”²⁵ While there was some opposition to autopsies, this opposition does not seem to figure in cases of homicide: “Indeed, family members often requested the invasive examination, with the pursuit of justice outweighing concerns with the hereafter and with every successful presentation of evidence this type of testimony increased in value.”²⁶ Cases where family members objected to the use of autopsy may have certainly existed, but the overall sentiment throughout the early modern era was one of recognized necessity of the procedure.

The testimony of medical professionals in other cases affirms that autopsies were performed when there was suspicion, whether that suspicion was raised by official powers or by community members, that a death may not have been natural. As previously seen in the case of Joseph Everet, in cases of delayed death, when death did not occur until a few days after an injury was incurred, there was understandable interest in determining whether legal proceedings should follow the death. In the 1727 trial of Mary Davis, the deceased did not die until some

²⁴ *OBP*, December 1731, trial of Francis Hitchcock , alias Whitaker (t17311208-23).

²⁵ *OBP*, May 1762, trial of Jane Sibson (t17620526-18).

²⁶ Vanessa McMahon, *Murder in Shakespeare's England*. (Hambledon Continuum 2006), 34

days after the conflict. The surgeon who performed the autopsy testified that “he opened the Body of the Deceased for the Satisfaction of himself and others”.²⁷ The language used by this doctor is an apt elucidation of the purpose of the autopsy during this era: to delve into the working of the human body and determine its reaction to violence. In addition, it would be naive not to examine the benefit of these autopsies to the medical profession. The lack of medical cadavers for experimentation in this era has been commented on at length; autopsies provided a valuable opportunity for a surgeon or medical student to examine human anatomy.²⁸ In this way, the autopsy was a procedure that contributed not only to the development of the legal system but that of the medical profession, with the rate of autopsy suggesting an English medical community much more active and knowledgeable than often thought.

While the growing use of autopsy in criminal trials is likely accordant with the increasing importance of expert witnesses, its effect on the medical field should not be discounted. Through the examination of trial transcripts, we can see the evolution and professionalization of post-mortem analysis. The autopsy represented a fundamental change in the duties of the English medical professional. No longer did the role of the doctor cease after life had been extinguished but now extended into death, marking a shift in the understanding of what medical care entailed and adding a secular dimension to an event traditionally associated with religious authorities. “Although early modern physicians had traditionally abandoned a patient to the ministrations of the clergy as soon as they had pronounced the inevitability of death, the growing interest in morbid anatomy required them then to negotiate permission to open the body.”²⁹ In this way, the

²⁷ *OBP*, August 1727, trial of Mary Davis (t17270830-5).

²⁸ Ruth Richardson, *Death, Dissection and the Destitute* (Chicago: Univ. of Chicago Press, 2009).

²⁹ Harley, “Political post-mortems and morbid anatomy in seventeenth-century England”, 3

frequency with which autopsies were performed in early modern England challenges our conception of the early modern English doctor and his changing relationship with the patient and the body.

While there were more autopsies performed in the sixteenth and seventeenth centuries than often thought, that number rose by a great deal during the eighteenth century. This rise has been associated with a growing field of medicine and shifts occurring in the English legal system. As the eighteenth century progressed, English courts began to slowly shift from focusing on character to demanding expert testimony and a verifiable construction of events. The autopsy provided early modern jurors with definitive evidence upon which to base their verdicts. As Vanessa McMahon argues, “by 1729, the body had attained clear prominence, with around 40 per cent of all homicides having an autopsy performed under the direction of the coroner or presiding JP.”³⁰ The evolution of public hospitals in England during this era also influenced the number of autopsies performed. As explored elsewhere, there is evidence of a correlation between an individual being treated by a surgeon prior to their death and that surgeon performing the autopsy. In addition, hospitals created greater access between the corpse and a medical professional, facilitating the quick performance of an autopsy. An examination of contemporary sources suggests that autopsies were fairly routine in cases where the deceased had entered the hospital prior to their death. In the trial of Daniel Asgood in 1768, an autopsy was ordered before the victim had even died. The surgeon who performed the autopsy testified that he had been directed by his superior to perform an autopsy in case of death, evidence that surgeons at times performed autopsies prior to the request of a coroner or parish official. “Upon representing the

³⁰ McMahon, *Murder in Shakespeare's England*, 35.

case to me, Mr. Young desired I would open the head in case he died, and examine it”.³¹ In addition, it would be naive not to examine the benefit of this access to corpses to the medical profession. The lack of medical cadavers for experimentation in this era has been commented on at length; autopsies provided a valuable opportunity for a surgeon or medical student to examine human anatomy.

An interesting consequence of the growth of hospitals in England during this time is that autopsies were now being performed under circumstances that may not have not have resulted in a post-mortem examination, had the deaths occurred elsewhere. In 1762, a patient at St. Bartholomew’s was accused of infanticide following the discovery of an infant’s corpse in the hospital necessary house. The surgeon who had been attending the patient performed an autopsy upon the infant, a practice not yet ordinary in cases of infanticide.³² The fact that the accused had been a patient at the hospital at the time of the crime likely facilitated the performance of autopsy. While hospital autopsies make up part of a larger trend of the increased use of autopsy in England during this period, they are also evidence of the professionalization and social disconnection of the medical profession, in which the patient on the autopsy table was not a member of the doctor’s community, but a case to be studied. In this way, the autopsy was a procedure that contributed not only to the development of the legal system but that of the medical profession, with the rate of autopsy suggesting an early modern English medical community much more active and knowledgeable than often thought.

While there is evidence throughout the early modern era of autopsies performed as result of concern raised by families or other loved ones, the power to order an autopsy rested in the

³¹ *OBP*, January 1768, trial of Daniel Asgood (t17680114-13).

³² *OBP*, December 1762, trial of Ann Haywood (t17621208-26).

hands of the coroner. Although social pressure certainly could play a role in the decision to order an autopsy, there is some evidence that the opinion of medical experts was given more weight. When Sir Theodosius Boughton died in 1780, his death was first attributed to a stomach illness that had plagued the deceased for several years. An autopsy was not performed until the physician of the deceased received an anonymous letter suggesting that Sir Boughton's death had not been natural. Boughton's brother-in-law Captain John Donnellan had requested an autopsy prior to this but Boughton's doctor has argued that an autopsy was not necessary, "not knowing that any particular purpose was to be answered by it, except the satisfaction of the family."³³ However, consistent pressure and the receipt of the anonymous letter resulted in an autopsy that discovered evidence of poisoning in Sir Boughton's body, specifically cyanide. The accounts of Boughton's case, and the controversial trial that followed, are invaluable in allowing us to examine how the decision to perform an autopsy could be impacted by medical opinion, as well as illustrating that laypeople were also able to influence this decision.

While the ultimate goal in the majority of autopsies performed in England during this era was to investigate the cause of death, autopsies were also performed to determine information concerning the health of the deceased that the court felt was relevant to the case. In several cases studied, an autopsy was performed in order to determine whether the deceased was pregnant when she died. In one such case, external examination showed that Ruth Auton, murdered in 1664, had been strangled and her neck broken, differing from the original assumption that she had died of attempted self-induced abortion. An autopsy was performed by Abraham Jennings, which proved that she had been pregnant at the time of her death, which cemented the case

³³ *The trial of John Donnellan, Esq. for the wilful murder of Sir Theodosius Edward Allesley Boughton, Bart. MDCCLXXXI. [1781]. Eighteenth Century Collections Online*. , <https://link.gale.com/apps/doc/CW0123772263/ECCO?u=uvictoria&sid=ECCO&xid=ffd6a125&pg=29>, 29

against her lover Richard Rodgers.³⁴ While Auton's state at the time of her death formed an important part of the accusation against Rodgers, other cases show that the state of the deceased's womb was examined in order to dispel rumours. During the autopsy of Elizabeth Osborn, stabbed by her employer in 1720, the surgeons, "there having been a Report given out that she was with Child...[,] opened the Womb, and found all the Demonstrations that she was not."³⁵ The benefits of this particular form of autopsies can be seen in the case of Sarah Stout, in which the deceased's mother asked for an autopsy to be performed as a response to rumours that Stout had committed suicide due to her pregnancy. As the surgeon deposed, "I came down, I think on the 27th of April, and lay at Mrs Stout's house that night, and by her discourse I understood she wanted to be satisfied, whether her Daughter was with Child."³⁶ In this way, autopsies provided not only evidence concerning the cause of death but provided scientific evidence against which to judge witness testimony and to refute false accusations concerning the character of the deceased, an element which was still highly decisive in many early modern murder trials.³⁷

Throughout the early modern era, there is evidence that an autopsy was a standard enough part of English murder cases that its absence was noted. The absence of autopsy in controversial cases was commented upon as early as the first part of the seventeenth century. After the death of Sir Thomas Overbury in 1613, the failure to perform an autopsy contributed to

³⁴ Loar, "Medical Knowledge and the Early Modern English Coroner's Inquest", 481

³⁵ *OBP*, January 1720, trial of Jane Griffin (t17200115-35).

³⁶ *The tryal of spencer cowper, esq, john marson, ellis stevens, and william rogers, gent. upon an indictment for the murther of mrs. sarah stout*, <http://search.proquest.com.ezproxy.library.uvic.ca/books/tryal-spencer-cowper-esq-john-marson-ellis/docview/2241001312/se-2?accountid=14846>

³⁷ Andrea McKenzie, "'His Barbarous Usages', Her 'Evil Tongue': Character and Class in Trials for Spouse Murder at the Old Bailey, 1674-1790," *American Journal of Legal History* 57, no. 3 (2017): pp. 354-384

rumours that there had been official collusion in the murder plot.³⁸ Rather than being seen as typical, the lack of post-mortem examination was remarked upon at the trial, with many using this fact to hint at a conspiracy to prevent the true cause of death from being determined. In attempting to demonstrate that Overbury's jailer had not committed the crime on his own, counsel for the crown alluded to the lack of autopsy and quick burial as evidence of a larger conspiracy. "Then remembering how ignominiously they buried him, not suffering any to see him for fear he should be digged up again, and without any Coroners inquest that should be found: And thus he ended his speech."³⁹ By the end of the eighteenth century, autopsies had become so standard that their absence was commented on during several trials concerning working class people as well. In the 1770 trial of Charles Stevens, the expert medical witness felt the need to comment on the lack of an autopsy, explaining that the body was in an unfit state to be opened at the inquest. Although autopsies were still not performed with the frequency that they are today, the excuses given for the lack of autopsy illustrate the prominence the procedure had attained, and the desire clearly expressed by juries for the definite evidence an autopsy could provide.

iv. Autopsies in Cases of Poisoning

Although poisoning cases were much rarer than cases of stabbing or brawling in England during the early modern era, the nature of the crime is such that the study of autopsies performed during cases of suspected poisoning warrant special attention. Although histories of poisoning focus largely on poison as a tool wielded by the wealthy and powerful, examination of Old Bailey court records reveal that poison was prominent in the minds of all classes during the early modern era. Autopsies were clearly especially important in cases of suspected poisoning, as

³⁸ Herman, *The royal art of poison*, 189

³⁹ Francis Bacon, *A True and Historical Relation of the Poysoning of Sir Thomas Overbury*, 1651

many of the poisons used during this era could mimic natural diseases whereas a gunshot or knife wound could not. Although cases of accused poisoning make up only 1% of *The Old Bailey Proceedings* of 1680 to 1780, they represent 2.4% of autopsies performed. Autopsies in cases of poisoning tended to be more complete than autopsies in cases of stabbing or blunt force trauma, as the surgeon was required to examine every internal organ, rather than one site of injury. In the murder trials concerning stabbing or blunt force trauma, it was usually an accepted fact that a violent action had occurred, whether that action had caused death or not. In cases of poisoning, however, it was yet to be determined that any assault had been committed, meaning that autopsies in cases of poisoning did not seek to determine whether the actions of the accused had caused the death, but whether that action existed at all.

While toxicological tests for poisons like arsenic continue to be perfected, the examination of medical testimony in poisoning cases reveal the methods early modern surgeons used to determine the presence of poison during autopsies. In the 1726 trial of Mary Sherman, accused of poisoning her neighbour, two surgeons and one apothecary testified as to the condition of the stomach and other internal organs in the post-mortem, explaining the procedure and methods they had used as a basis for their conclusion that poison had not been the cause of death. The testimony of Mr. Belcher, the apothecary, reveals one early toxicological experiment that many modern readers may find barbaric: the use of animals as test subjects. “I advis’d them to make some tryal of its Effect, upon a Puppy, or a Kitling, but they said, there was not enough left, to make the Experiment.”⁴⁰ While certainly a cruel and crude experiment, the results were often fairly reliable, and a version of this experiment is still used to determine the lethality of

⁴⁰ *OBP*, August 1726, trial of Mary Sherman (t17260831-34).

various substances.⁴¹ A similar test was performed in the trial of Captain John Donnellan for the murder of Sir Theodosius Boughton, in which both the stomach contents and the medicine alleged to be poisonous were tested upon animals.⁴² Medical professionals were also willing to undertake a certain level of risk themselves. Early modern doctors relied upon their sense of smell as well as their sense of taste during an autopsy, attempting to pick up the bitter almond-like smell of cyanide or the bitter acridness of cantharides. In Sherman's trial, two of the medical experts testified to having tasted the contents of the stomach during autopsy. This category of experiments is neither precise nor elegant, but McMahon suggests that these experiments represent a noble attempt to examine the human body in the hopes of doing justice to the dead, and that the somewhat repellent nature of this evidence should not lead to it being discounted as an important aspect of forensic investigation. "The creative evidence of bruises and vomit eaten by otherwise healthy animals was as much a part of this noble endeavor to understand the world as a dissection by an elite doctor."⁴³ Although these tests are not typically considered when discussing early English toxicology, discounting these experiments serves to give a false view of the scientific options available to the doctor performing an autopsy to determine the presence of poison.

The majority of autopsies in cases of suspected poison were intended to determine whether any poison was actually present. While this alone was a delicate procedure, surgeons were at times expected to answer more difficult questions, such as when the poison had been ingested. In the

⁴¹ IUPAC. Compendium of Chemical Terminology, 2nd ed. (the "Gold Book"). Compiled by A. D. McNaught and A. Wilkinson. Blackwell Scientific Publications, Oxford (1997). XML on-line corrected version: <http://goldbook.iupac.org> (2006-) created by M. Nic, J. Jirat, B. Kosata; updates compiled by A. Jenkins.

⁴² *The trial of John Donnellan*, 27

⁴³ McMahon, *Murder in Shakespeare's England*, 124

1739 trial of Catherine Demay, the poison used had already been determined when the case went to trial; in this case, Demay was accused of poisoning a servant at her lodging-house with cantharides, otherwise known as Spanish Fly. The testimony of several surgeons concluded that cantharides had been found in the body, evidence that would usually be fairly damning for the accused. However, as other witnesses testified that the deceased had been self-administering cantharides in order to treat what was implied to be a sexually transmitted infection, the question was not whether poison had been used, but whether it had been administered by the accused, a question that required the medical testimony to give a clear window of time of ingestion. In this case, an animal experiment was once again cited: “Mr. Brumpton said... that he had made Experiments upon two Dogs, and found the Symptoms appear in less than six Hours.”⁴⁴ The medical evidence presented in the Demay case opens a window onto the more precise autopsies performed during this era, once again illustrating the importance of medical evidence in early modern English trials.

v. The Medical Examiner

In investigating autopsies in early modern England, one must investigate the identity of those who performed them. Autopsies as a procedure require a knowledge of the signs illness and violence leave on the human body, and this knowledge requires training in dissection. From the mid-sixteenth century onwards, demonstrations of human dissection were performed at several English medical training facilities, including the London Barbers-Surgeons’ Company.⁴⁵ In the overwhelming majority of cases, the autopsy was performed by a surgeon. Exceptions to this include cases where autopsies were performed by apothecaries or by male midwives in cases of

⁴⁴ *OBP*, January 1739, trial of Catherine Demay (t17390117-7).

⁴⁵ Harley, “Political post-mortems and morbid anatomy in seventeenth-century England”, 4

infanticide. The professional identity of the individual who performed the autopsy provides insight into the complex medical hierarchy of early modern England. The sixteenth century had seen the formulation of a hierarchy within the practice, with physicians at the top.⁴⁶ Surgeons, who gained their training through apprenticeships, were associated not with the procedure of surgery as we understand it today. Rather, their work was considered to be closer to a trade compared to the university-educated physician.⁴⁷ The academic training given to physicians placed them above the surgeon socially, and consequently meant they had less experience actually practicing medicine.⁴⁸ In Old Bailey criminal cases, it is overwhelmingly a surgeon who performed the autopsy, evidence of both the class identity of the majority of those who sat in the dock, as well as indicating the understanding of the autopsy as a procedure that relied upon knowledge of the human body.

In many cases, although the surgeon deposed does not explicitly say who ordered him to perform a post-mortem examination, the surgeon had previously cared for the victim, either as a regular surgeon or as emergency aid after the victim was wounded. This evidence suggests two possibilities: that these surgeons performed post-mortem examinations of their own accord, perhaps anticipating possible criminal proceedings or to satisfy their own curiosity, or that, when ordering autopsies, courts gave preference to surgeons with previous experience of the victim's health. In the case of William Wells, killed with a blow to the head in 1734, a surgeon was called to treat him on the day of the injury, and was called by the coroner to perform an autopsy as part of the inquest after the death. "On the Thursday following the Coroner sent for me. I open'd the

⁴⁶ Ankur Aggarwal, "The Evolving Relationship between Surgery and Medicine," *AMA Journal of Ethics* 12, no. 2 (January 2010): pp. 119-123, <https://doi.org/10.1001/virtualmentor.2010.12.2.mhst1-1002>.

⁴⁷ McMahon, *Murder in Shakespeare's England*, 39

⁴⁸ Jonathan Barry. "Educating Physicians in Seventeenth-Century England." *Science in Context* 32, no. 2 (2019): 137-54, 138

Head of the Deceas'd...I believe the Wound was the Cause of his Death.”⁴⁹ In this case, the coroner showed a preference for a surgeon who had previous knowledge of the situation. As previously mentioned, the development of the hospital system in England facilitated the performance of autopsies not as a result of a coroner’s inquest but to satisfy the doctor’s professional curiosity. After the death of Thomas Page at St. Bartholomew’s Hospital in 1744, the doctor who attended him testified that he had performed an autopsy in order to gain a complete picture of the cause of death: “for my satisfaction after his death I opened his skull, and there was no concussion or fracture which occasioned his death.”⁵⁰ For this doctor, the accessibility to the body allowed a deeper examination into the patient’s death, and permitted the doctor to add to their own knowledge of the human body.

Regardless of the capacity in which the doctor had treated the deceased prior to death, the fact that the doctor performing the autopsy often had previous knowledge of the deceased’s health suggests that the duties of the English doctor did not end with the death of their patient, but that doctors were regularly expected to explain both their treatments and their conclusions before official authorities as part of their duties. The fact that some of these autopsies were performed prior to a coroner’s inquest suggests that the number of autopsies performed during this era may be even higher than printed sources suggest.

Trials described in *The Old Bailey Sessions Papers* and other printed sources from the early modern era indicate that autopsies were usually performed by several medical professionals. A notable exception is cases in which a surgeon was called to treat a living person and found them dead upon arrival. At the autopsy of Adam Cluff, performed for the trial of

⁴⁹ *OBP*, July 1734, trial of Humphry Remington (t17340710-24).

⁵⁰ *OBP*, October 1744, trial of Edmund Long Henry Townley Charles Savage (t17441017-24).

Colonel Francis Fuller, no less than eight surgeons were present at the autopsy. The presence of so many experts at the autopsy table suggests not only a culture of professional collaboration, but one of mutual surveillance. During the 1766 trial of John Stevens, the accused was able to procure a surgeon of his own to participate in the autopsy alongside the surgeon appointed by the coroner, indicative perhaps of the growing impact of defence counsel in English courts.⁵¹ During the trial of John Stevens, Archibald Harris testified that he had performed an autopsy alongside a surgeon hired at the request of the accused. “I am a surgeon: I was sent for to view the deceased's body in Bridewell, I found the surgeon of the Westminster hospital there at the request of the prisoner”.⁵² There is also evidence that the presence of multiple surgeons at autopsies fostered an environment in which medical experts who failed to perform to professional standards could find themselves facing both professional and legal consequences, as seen in the treatment of John Tyrell in the trial of Jane Sibson described elsewhere in this paper.

vi. The Autopsy Procedure

The lack of a legal organization or guidelines meant there was no set procedure for performing an autopsy. However, the analysis of murder cases gives some insight into how discretion and precedence influenced how an autopsy was performed, as well as what was expected from expert medical witnesses in court. While there was no set of guidelines for medical witnesses, instructing them exactly on how to perform an autopsy, an examination of murder cases reveal that medical experts seem to have understood what evidence would be expected of them, and performed the procedure accordingly. In cases of violent sudden death, autopsies were typically

⁵¹ J. M. Beattie, “Scales of Justice: Defense Counsel and the English Criminal Trial in the Eighteenth and Nineteenth Centuries,” *Law and History Review* 9, no. 2 (1991): pp. 221-267, <https://doi.org/10.2307/743649>.

⁵² *OBP*, April 1766, trial of John Stevens (t17660409-67).

performed, if not immediately, then as soon as possible. In addition, the testimony of medical witnesses reveals that certain information was expected from the medical expert that had performed an autopsy. This information depended on the crime committed but included information such as the depth of the wound, the organ affected, and the general appearance of the body. The examination of medical testimony can also reveal the standards of the medical community and how their understanding of the procedure changed over time. In more complicated cases, there is evidence that surgeons preserved organs in order to examine them more closely or to ask a colleague for a professional opinion. In the trial of Jane Sibson, a medical expert testified that he had ordered the stomach of the deceased to be removed and preserved in order to better examine it: “I said, Leave the stomach, we will examine it again. He returned the stomach to me in spirits; then I more particularly examined it”⁵³. This statement gives insight into the way early modern autopsies were often specific to the method of death suspected, as the suspicion of poisoning in this case required the doctor to give evidence not merely of the general appearance of the body but of the specific contents of the stomach.

While a cursory examination of medical testimony in murder cases indicate that autopsies were performed regularly in early modern courts, a more in-depth analysis is required in order to gauge the accuracy and utility of these post-mortem examinations. In this, researchers are confronted with a difficult quandary. As Sara Beam has noted, trial records from the early modern era are by their very nature incomplete. The narratives presented during criminal trials are not intended to give a transparent record of events, but to either accuse or prove innocence.⁵⁴ This is especially true in murder cases, in which the victim is unable to explain their own death,

⁵³ *OBP*, May 1762, trial of Jane Sibson (t17620526-18).

⁵⁴ Sara Beam, *The Trial of Jeanne Catherine: Infanticide in Early Modern Geneva* (Toronto: University of Toronto Press, 2021).

and the murderer has no benefit in doing so. How is it possible to say definitely whether an autopsy gives an accurate portrayal of the cause of death if it is impossible to know definitively what the circumstances surrounding death were? While the trial account and final judgment provide a reliable enough version of events, it is frustratingly impossible to know whether that is the full and complete story. In order to examine the quality of post-mortem examinations, one possible solution is to examine the post-mortem evidence given alongside modern medical knowledge to determine the accuracy of such evidence. While the full testimony of the surgeon who performed the autopsy is not always available, there are certain primary sources that allow insight into the procedure of the early modern autopsy, and thus, the opportunity to evaluate the scientific quality of such procedures.

In the case of Mary Blandy, accused of poisoning her father Francis, one Dr. Addington testified as to the state of the organs most affected by arsenic poisoning, the lungs, heart, kidneys, and liver.⁵⁵ In addition, Addington described the corpse's skin as "livid",⁵⁶ another symptom of arsenic poisoning.⁵⁷ However, in evaluating an autopsy, the best option is to return to the primary source: the body. Scientific progress in the field of exhumation and pathology has provided historians with current-day evaluations of early modern corpses upon which contemporary autopsies were performed, allowing us to evaluate these procedures alongside modern medical knowledge, such as the modern exhumation and autopsy of Henry Stuart alluded to earlier in this paper. In addition, modern physicians have evaluated several famous autopsies according to current medical standards, illustrating once again the historical benefits of these

⁵⁵ William Roughead, *Trial of Mary Blandy*, 1914.

⁵⁶ Roughead, *Trial of Mary Blandy*

⁵⁷ R. N. Ratnaik, "Acute and Chronic Arsenic Toxicity," *Postgraduate Medical Journal* 79, no. 933 (January 2003): pp. 391-396, <https://doi.org/10.1136/pmj.79.933.391>.

high-profile autopsies and giving yet more insight into the accuracy of early modern pronouncements. The autopsy of Edward VI shortly after his death in 1553 found that the young king's lungs were diseased and "had in them two great ulcers and were putrefied, by means whereof he fell into consumption, and so hath he wasted, being utterly incurable."⁵⁸ A study published in 2001 concluded that Edward had died "due to rapidly progressive tuberculosis that developed after he had measles."⁵⁹ When available, these modern studies of notable deaths provide valuable analysis of the conclusions of early modern English autopsies.

The exact procedure undertaken in performing an autopsy changed throughout the early modern era, adapting to new understandings of anatomy and the increasingly high professional standards to which doctors were held in the courtroom. Not only did the frequency of autopsies seem to increase throughout the early modern period, the depth and breadth expected from the procedure increased as well. By 1781, Dr. Rattray, testifying in the trial of John Donnellan, commented that "Nobody would attempt to form a judgment upon the external appearances altogether."⁶⁰ Rattray's comment is indicative of the increasingly rigorous standards for autopsies as the field of forensic medicine became more professional. Interestingly, this change in the breadth and specificity expected from a post-mortem examination was not led by the regulations of an official body or by rules set in place by a legal code, but by the medical profession, illustrating the way that the medical community and its self-policing filled the gap in oversight in a way that has not yet been extensively researched.

⁵⁸ Communication from Privy Council, as quoted by Edmund Lodge, *Portraits of Illustrious Personages of Great Britain: Engraved from Authentic Pictures in the Gallerie of the Nobility and the Public Collections of the Country: with Biographical and Historical Memoirs of Their Lives and Actions* (Harding and Lepard, 1835).

⁵⁹ Grace Holmes, Frederick Holmes, and Julia McMorrough, "The Death of Young King Edward VI," *New England Journal of Medicine* 345, no. 1 (May 2001): pp. 60-62

⁶⁰ *The trial of John Donnellan*, 33

While there was no official body to regulate the performance of autopsies in England during the early modern era, primary sources reveal the existence of oversight, both by other players involved in the investigation of murder and by medical peers, as well as consequences of failure to meet professional standards. In the trial of Jane Sibson, discussed elsewhere in this paper, several experts were present at the autopsy, as was usual in cases of suspected poisoning. In examining the trial account, it is possible to determine the professional standards and expectations. Of the three men present, two were surgeons and one an apothecary. Both surgeons concluded that the death had been due to natural causes, while the apothecary, John Tyrell, maintained there was evidence of poisoning. Tyrell admitted to signing the death certificate declaring the death to be natural but claimed to have signed it only after being pressured to do so, testifying that he “objected to the signing any thing for three hours.”⁶¹ During cross-examination, defence counsel accused Tyrell of not only having perjured himself concerning the signing of the certificate, but of lacking the experience to make such a declaration. During this examination, Tyrell was also accused of misleading a judge concerning the opinion of another doctor and of aiming to profit off the death, saying he “could make an excellent twelvepenny pamphlet of it”⁶², which Tyrell confirmed was his plan. While Tyrell’s comment is suggestive not only of his own less than noble motives, it also provides insight into the growing demand for tales of murder, a demand that is largely responsible for the increased reporting of autopsy performance during this period. Following the acquittal of Jane Sibson, Tyrell was indicted for perjury. At this trial, one of the surgeons present at the autopsy of George Sibson testified that he had been surprised at Tyrell’s lack of professionalism in declaring his conclusion prior to a complete examination: “it affected me very much to see a man expressing himself with so much joy, before we were certain it

⁶¹ *OBP*, May 1762, trial of Jane Sibson (t17620526-18).

⁶² *OBP*, May 1762, trial of Jane Sibson (t17620526-18).

was so.”⁶³ Tyrell’s trial and conviction provides insight into the impact of the emerging trend of professional witnesses and the increasing presence of counsel in the courtroom on the presentation of medical evidence, as well as the growing market for tales of murder.

vii. The Use of Autopsy Evidence in Court

Although the English legal system had not yet experienced the wave of reform it would in the nineteenth century, there is evidence that medical expert witnesses were gaining precedence during this time, as they were both used more frequently, and their evidence perceived as more reliable.⁶⁴ When an autopsy was performed, the medical expert was not only responsible for the examination of the body but for presenting his conclusion in court. The evidence of autopsies reported on in criminal trials, as well as the reception of this evidence of court, sheds light on early modern opinions surrounding the operation and the growing field of forensic science in general. As McMahon has observed, the rise in the use of autopsies in English criminal trials is indicative not only of medical advances but of public demand for more scientific types of evidence: McMahon has noted the growing demand for proof that did not rely upon human memory or circumstance. “Despite its fallibility, tangible proof was increasingly demanded by, and helped to determine, early modern justice.”⁶⁵

Autopsies served not only to confirm eyewitness testimony but, at times, to challenge it. The power of the autopsy to contradict witness testimony can be seen in the trial that followed

⁶³ *OBP*, September 1762, trial of John Tyrrell (t17620917-31).

⁶⁴ John H. Langbein, *The Origins of Adversary Criminal Trial* (Oxford: Oxford University Press, 2010).

⁶⁵ McMahon, *Murder in Shakespeare's England*, 47.

the death of Peter Howseley in 1690. In this case, witnesses testified that Howseley had been beaten outside a London tavern and that, on his deathbed, Howseley had accused his assailants of causing his death. The autopsy allowed the opportunity to either confirm or challenge this evidence. Two physicians and six surgeons performed an autopsy of Howseley's body and reported that they had not found "any sign whatsoever of any external violence or injury."⁶⁶ In her examination of this case, McMahon notes how the Howseley case provides an example of a case in which the traditional testimony, that of eyewitnesses, was placed directly against the evidence gathered during the autopsy, illustrating the way that forensic pathology changed the way that English courts handled evidence. "In this case, tangible, medical facts were being used in law to contradict traditional forms of evidence."⁶⁷ As the field of forensic science became more established, public confidence in post-mortem analysis increased. A survey of coroner's inquests in Cheshire county from 1600 to 1800 has suggested that, while medical opinions had been sought by inquests prior to the eighteenth century, this period saw an increase in the weight given to medical opinion. "Cheshire coroners holding inquests before that time had, of course, called on the opinions of physicians, 'chirurgions', barber-surgeons, and, on at least one occasion, a bone-setter. But a number of cases from the later eighteenth century do show the opinions of medical men being afforded greater respect, and on one occasion, indeed, overturning an inquest jury verdict."⁶⁸ During this era, the medical expert became not only a more frequent figure in the courtroom, but a more respected one, one whose opinion was taken

⁶⁶ Quoted by McMahon, *Murder in Shakespeare's England*, 43

⁶⁷ McMahon, *Murder in Shakespeare's England*, 44

⁶⁸ James Sharpe and J.R. Dickinson, "Coroners' Inquests in an English County, 1600–1800: A Preliminary Survey," *Northern History* 48, no. 2 (2011): pp. 253-269, 267

with greater weight than that of laypeople, indicating a nascent hierarchy of experience amongst witnesses in criminal trials.

As the English court system changed over the early modern era, the use of medical expert testimony is evidence of a system moving towards modern ideals of impartiality and fact-based evidence. As the English legal machine grew, the growing demand for autopsies and other forms of forensic evidence during this era is in line with a growing demand for reliable and verifiable evidence. McMahon has suggested that both shifts in public opinion and changes to criminal law procedures served to increase the need for expert evidence within the courtroom. “The ideological shifts of the seventeenth century, followed by the legislative changes of the eighteenth, played a role in making experts more desirable as the source of objective truth in the courtroom, pushing bodies to the forefront of the legal process.”⁶⁹ In addition, medical expert witnesses were some of the first witnesses to appear in large numbers in English courts who were not testifying on behalf of one party in the courtroom. While the English judicial system still relied upon private citizens to prosecute most crimes (murder being the most important exception to this rule, as the victim could hardly be expected to prosecute), the majority of surgeons who performed autopsies were not hired by either the accused or the accuser. Examination of medical testimony in court reveals that which surgeon performed an autopsy relied largely on convenience. As previously mentioned, in many cases, the surgeon who performed the autopsy had originally been called to treat the deceased, especially in cases of death following a violent conflict. As the autopsy often preceded criminal charges, medical experts were usually fairly impartial in their evidence. “Usually, experts were not hired after the fact to provide courtroom testimony but were percipient witnesses who had seen something during the course of treating a

⁶⁹ McMahon, *Murder in Shakespeare's England*, 35

patient or conducting an autopsy that was deemed relevant to the trial. Such experts seldom appeared to feel allegiance to either side.”⁷⁰ The formulation of the English judicial system that allowed for a coroner to order an autopsy as part of an inquest meant that an autopsy might occur prior to an arrest, meaning that the surgeon performing the autopsy was not employed by either side of the case, allowing the medical expert witness a level of neutrality not present in other types of witness. In addition, as previously explored, it was not unheard of for an autopsy to be performed of the surgeon’s volition, prior to an inquest, further increasing the argument that the medical expert presenting evidence gathered during an autopsy was one of the earliest examples of a neutral party in the witness box in England.

The harsh punishments prescribed by the English legal code placed enormous pressure upon surgeons to be prepared to defend their analysis or to give up on experiments once they were called into question. While the majority of post-mortem analysis was intended to discover how a living person had died, autopsies performed in infanticide cases dwelt largely on determining whether the infant had ever lived, especially important during an era in which there were both harsh punishments for infanticide and high levels of natural infant mortality. The harsh punishments for infanticide were of special concern, as the charge could not be downgraded to manslaughter, as other forms of murder could be. One test that purported to prove whether the infant had been born alive was the hydrostatic test, more commonly known as the lung flotation test, in which the infant’s lung would be removed and placed in water. If the lung sank, theory held, that was proof that air had never been inhaled, and thus proved the infant had been still-born. While this test provides interesting insight into early modern notions of anatomy

⁷⁰ Stephan Landsman, "One Hundred Years of Rectitude: Medical Witnesses at the Old Bailey, 1717-1817." (*Law and History Review* 16, no. 3 (1998), 461

and bodily functions, the reception of this test in courtrooms offers an opportunity to determine the medical knowledge of jurymen, as well as illustrating the debate that raged in the medical community.

Although the lung flotation test seems to have been well-known by laypeople during this period, judging by several cases in which the jury asked whether it was performed, doctors disagreed as to its accuracy. Evidence of the controversial nature of this test can be found in medical pamphlets of the time, most famously in William Hunter's publication "On the Uncertainty of the Signs of Murder, in the Case of Bastard Children", originally published in 1784. This publication, often noted for its sympathetic tone towards women accused of infanticide, Hunter questions whether the hydrostatic test is definite enough to be included in a court of law, citing several situations in which such a test would not be conclusive. In addition, Hunter elucidates the responsibility of the medical witness in the courtroom, emphasizing the immense burden placed upon them to cast the deciding vote upon the life or death of the accused: "danger, in the cases of which we are now treating, may arise from the evidence and opinions given by physical people, who are called in to settle questions in science, which judges and jurymen are supposed not to know with accuracy."⁷¹ Although criticism of the hydrostatic method for determining still-birth is sometimes categorized as a late-20th century phenomenon⁷², criticism of the hydrostatic test was frequently expressed by medical experts during criminal trials during the early modern era.

⁷¹ W Hunter. *On the uncertainty of the signs of murder in the case of bastard children*. (J. Callow, 1815).

⁷² Bianca Phillips and Beng Beng Ong, "'Was the Infant Born Alive?' A Review of Postmortem Techniques Used to Determine Live Birth In Cases of Suspected Neonaticide," *Academic Forensic Pathology* 8, no. 4 (2018): pp. 874-893.

As faith in forensic science increased within the courtroom, medical testimony hints that doctors were increasingly aware of the weight their words and experiments carried, as evidenced by the disclaimers many doctors included concerning their own tests. In 1737 trial of Mary Wilson for infanticide, a surgeon, directed by the accused's master and the coroner to perform an autopsy, testified as to the results of a lung flotation test. Although the surgeon testified that the lungs had floated, he accompanied this fact with a disclaimer: "And without some other Circumstances to corroborate this Experiment, I should be loth to determine thereby positively. I think the Experiment (where a Person's Life is at Stake) too slight to be built upon."⁷³ Other surgeons refused to comment on the results of the lung flotation test at all. In the case of Frances Palser in 1755, the surgeon performed a lung flotation test only at the behest of the coroner and refused to comment on the results, testifying that he "declined it, as looking upon it not conclusive."⁷⁴ The critical comments of many doctors concerning post-mortem tests of the era is at odds with the popular perception of early modern surgeons as uncritical and unscientific, as well as demonstrating the surgeon's understanding of the heavy burden placed upon them when they testified. As previously mentioned, manslaughter was not an option to juries in cases of suspected infanticide. Thus, the lung flotation test is an especially apt one to illustrate how doctors were often conscious of the impact their evidence would have. In this way, cases of infanticide placed increased pressure on the medical witness to explain the vagueries of the test, as the evidence that the infant had been alive upon delivery could be sufficient evidence to convict. In addition, the refusal to comment upon the test indicates the growing power of the medical expert within the courtroom, as the doctor who refused to comment was essentially

⁷³ *OBP*, April 1737, trial of Mary Wilson (t17370420-18).

⁷⁴ *OBP*, July 1755, trial of Frances Palser (t17550702-21).

placing his own experience over the demand of the coroner or judge, indicative of the increased prestige of and value invested in medical testimony.

While it is difficult to determine the exact impact autopsy testimony had on the final verdict, through the examination of trial transcripts, there is evidence that evidence from autopsies was valued highly by juries. In the 1752 trial of Mary Carpenter for poisoning her employer with zinc sulfate, which occurred just two months after the trial of Mary Blandy, the autopsy was allegedly ordered by the deceased prior to his death. Mark Hawkins, the expert medical witness who had performed the autopsy, testified that “I was as exact as possible, I did not perceive any thing at all... upon the whole there was not any thing that I could imagine occasioned by what he had taken in his stomach, from poison, or any thing of that kind”⁷⁵. Despite overwhelming witness testimony that Carpenter had confessed to poisoning Hill, she was acquitted, perhaps illustrating growing confidence in medical testimony following the Mary Blandy case. Thus, “by the later eighteenth century...members of the medical profession had established themselves as key players among the ‘decision-makers’ whose input was instrumental in producing an inquest verdict or a subsequent trial verdict.”⁷⁶ While forensic science was certainly more modernized in places such as France, England was not as isolated as has often been assumed. “Recent scholarship, however, has suggested that the English legal system ‘was never quite so peculiar or insular’ as it has been ‘portrayed’”.⁷⁷

⁷⁵ *OBP*, May 1752, trial of Mary Carpenter (t17520514-30).

⁷⁶ Sharpe and Dickinson, “Coroners' Inquests in an English County”, 268

⁷⁷ Loar, “Medical Knowledge and the Early Modern English Coroner's Inquest”, 476

viii. Forensic knowledge

While the examination of sources such as trial accounts bring us closer to answering the question how, why, and when autopsies were performed in early modern England, it does not answer the question of how English medical practitioners learned to perform an autopsy, and how the English public learned to interpret it.

In previous scholarship, much has been made of the disparity between the number of publications on autopsies in continental Europe and Scotland compared to the number in England during the early modern era. Although there is little doubt that the continent was more advanced in terms of forensic science than England, the island was not in a bubble. Information from continental scientists made its way to England, informing English scientists and doctors of new information concerning post-mortem examinations. In 1665, an English translation of French surgeon Ambroise Paré's seminal text *How to Make Reports, and to Embalme the Dead* was published, illustrating the ways in which continental knowledge was available in England. In addition, the presence of European doctors at English court, such as the Swiss doctor Théodore de Mayerne who performed Henry Stuart's autopsy, illustrates the connections between the European and the English medical community that allowed scientific discoveries to make their way across the Channel.

While these sources of continental information were likely hugely beneficial to English medical practitioners, there were also English sources of information that aimed to instruct on the signs and symptoms of violent death post-mortem. Richard Mead's 1702 text *Mechanical Account of Poisons*, in particular, provides descriptions of both the symptoms of various modes of poisoning, as well as the effect on the body as observed in the autopsy of animal test subjects. Mead provides in-depth analysis of his observations during an autopsy, and essentially provides

a checklist for those performing autopsies on victims of suspected poisoning. Although Mead performed his tests on animal subjects, he provides comparisons to human poisoning victims when available, including case studies done by other scientists when possible: “The same Symptoms with these, and manifest Signs of a burning Corrosion followed with Ulcers in the Bowels, Baccius observ’d in a young Man Poison’d by Sublimate, mixt with his Meat.”⁷⁸ Descriptions of similar post-mortem experiments were included in William Hunter’s writing on infanticide as well, indicative of the culture of experimentation underway in England during this time.

In addition to English texts on autopsy, the culture of practiced medicine in early modern England was one that emphasized personal experimentation and experience. During cross-examination of medical witnesses in early modern English courts, counsel focused on the doctor’s experience in treatment of the illness or wound in question. As seen in the cross-examination of Tyrell the apothecary examined elsewhere in this paper, lack of experience could be weaponized against a witness, suggesting to the jury that, despite medical training, a witness must have specific experience with the concern in question to be trustworthy. This is further suggested by the testimony of medical witnesses in many trials, who begin their testimony by describing their experience, whether through experiments or through treatment. The examination of these testimonies indicate that, although the academic qualifications of a surgeon were not as strictly policed then as they are today, English juries were expected to use the witness’s experience as a doctor and a scientist in order to determine the value of their testimony.

⁷⁸ Richard Mead. *A mechanical account of poisons in several essays*. By Richard Mead, M.D.F. R. S. And Physician to S. Thomas's Hospital, 4th ed. Dublin: printed by S. Powell, for George Ewing, at the Angel and Bible in Dame's-Street, and John Watson, on the Merchant's-Key, near the Old-Bridge, MDCCXXXVI. [1736]. *Eighteenth Century Collections Online*.

<https://link.gale.com/apps/doc/CW0108942940/ECCO?u=uvictoria&sid=ECCO&xid=048ec9f5&pg=4>.

In examining English literature concerning post-mortem examination, the concept of murder as an affront to the community is clear. Contrary to the conception that the autopsy was frightening and suspicious to the early modern English, there is clear evidence that it was perceived by many as a necessary part of medicine, unsavoury perhaps, but required, just as surgery might be. In several early modern medical texts, post-mortem procedures are included alongside cures for every-day ailments. In Richard Hawes' *The Poore-mans Plaster-box*, a text intended for those unable to consult a surgeon, instructions for determining whether a corpse was dead prior to being hanged are included alongside a remedy for toothache.⁷⁹ Richard Hawes' writing is an example of the resources available to lay people in early modern England. Primary sources illustrate that not only was the level of knowledge higher amongst the medical community than often assumed, but it was also higher amongst lay people as well. Lay knowledge of post-mortem science is evidenced in several trial accounts, especially those concerning deaths with which lay people would have had experience, such as the knowledge of drowning victims displayed by witnesses during the 1699 trial of Spencer Cowper for the murder of Sarah Stout. Throughout the trial, multiple neighbours of the victim gave evidence concerning the flotation of the corpse, an indication of whether death occurred prior to the victim entering the pond.⁸⁰ There is clear evidence that early modern English juries understood what an autopsy entailed and what information the procedure could offer. In the 1767 trial of Thomas Swinner for the murder of Mary Gardner, the doctor initially only examined the head, as that was the location of the wound. However, the jury felt this was not complete enough an examination upon which

⁷⁹ Richard Hawes, *The Poore-Mans Plaster-Box* (1634)
<http://search.proquest.com.ezproxy.library.uvic.ca/books/poore-mans-plaster-box-furnished-with-diverse/docview/2240906769/se-2?accountid=14846>

⁸⁰ *The tryal of spencer cowper, esq, john marson, ellis stevens, and william rogers, gent. upon an indictment for the murther of mrs. sarah stout*, <http://search.proquest.com.ezproxy.library.uvic.ca/books/tryal-spencer-cowper-esq-john-marson-ellis/docview/2241001312/se-2?accountid=14846>

to base a verdict, and requested further examination. “The next morning I received a letter from the Coroner, signifying the Jury were not satisfied with the examination of the head only, but desired I would examine the whole body, imagining she might receive some injury on some other part”.⁸¹ The knowledge of autopsies displayed by both witnesses and juries in English courtrooms contradict previous understandings of the contemporary attitude towards forensic pathology, suggesting that both the medical community and general public understood and embraced the operation as a method of investigating suspicious deaths.

Conclusion

In exploring the use of autopsy in early modern England, primary resources, specifically the Old Bailey *Proceedings* and other printed trial accounts and crime pamphlets, are invaluable. In reading these sources, one is invited into the lives of those not often explored in traditional historiography.⁸² These trials speak to the mundane violence of this era, recording street brawls, family conflict, and other interpersonal conflict. Just as this research privileges the lives of non-elite people, autopsies privileged the bodies of regular people in court, creating a hierarchy in which the experience of the victim, as interpreted through the state of their body after death, assumed centre stage. In this way, the autopsy marked a change in both the English legal system and medical system towards the bodies of regular people, creating a more equal system in which it was possible that the body of a servant could take precedence over the testimony of their master.

⁸¹ *OBP*, June 1767, trial of Thomas Swinner (t17670603-51).

⁸² Beam, *The Trial of Jeanne Catherine*, 2

While a cursory comparison of English and European official records would lead one to believe that the English system was primitive and ineffective compared to its European counterparts, a closer look at trial accounts reveals that autopsies were used by English courts throughout the early modern era and were not met with the hostility or suspicion too often attributed to the early modern English public. The tabulation and analysis of the data available in these sources allow unprecedented insight into the use of autopsy in criminal trials during this era, both as to the frequency with which the procedure was used as well as more detailed information concerning the perceived opportunities of the autopsy and its impact on the legal and medical community. Additionally, these sources refute the belief that forensic pathology did not have a significant impact in England until the Victorian era. Refiguring understanding of historical forensic pathology does not devalue the accomplishments of later scientists, but rather gives us a more nuanced and realistic picture of the English medical and legal system in the early modern era.

The science of autopsy in early modern England was not without faults; in fact, they are all too easy to uncover. However, the depiction of autopsies in this time as non-existent or flawed to the point of being useless is not only fallacious but ignores the ingenuity of these attempts and discoveries. The arguing that took place between medical expert witnesses concerning evidence gathered during post-mortem examination is not, as has been suggested, evidence that the field was unsteady and based in primitive imaginations of science. These disagreements are indicative of a vibrant scientific field in which experts are forced to defend their conclusions. In this way, the court acts as a microcosm of the scientific world, an arena in which theories and experiments are challenged and defended. In addition, the very inclusion of autopsies as part of early modern English criminal justice should not be discounted, as they are

representative of an attempt to conduct murder trials in a more evidence-based way.

Fundamentally, these early autopsies were an attempt to understand the failings of the human body and represented a desire for justice and a search for truth. As Vanessa McMahon has argued, ordinary early modern people, “anxious not to allow a murderer to go

unpunished...made use of ingenious evidence to prove guilt when few other options existed.”⁸³

The demand for autopsies and published autopsy reports on the part of early English doctors, juries, and the public at large as a means of investigating suspicious or violent deaths contradicts popular conceptions concerning the acceptance of science during this era, suggesting that further research might give a much more complex and nuanced picture of the early modern English criminal justice system than has long dominated the field.

⁸³ McMahon, *Murder in Shakespeare's England*, 124

Bibliography

Primary Sources

- Bacon, Francis. *A True and Historical Relation of the Poysoning of Sir Thomas Overbury with the Severall Arraignments and Speeches of those that were Executed Thereupon*. 1651 <http://search.proquest.com.ezproxy.library.uvic.ca/books/true-historical-relation-poysoning-sir-thomas/docview/2240901974/se-2?accountid=14846>.
- Hawes, Richard. *The Poore-Mans Plaster-Box Furnished with Diverse Excellent Remedies for Sudden Mischances, and Usuall Infirmities*. London: Printed by Tho. Cotes, for Francis Grove, 1634.
- Hitchcock, Tim, Robert Shoemaker, Clive Emsley, Sharon Howard and Jamie McLaughlin, et al., *The Old Bailey Proceedings Online, 1674-1913* (www.oldbaileyonline.org, version 7.0, 24 March 2012)
- Hunter, William. *On the Uncertainty of the Signs of Murder in the Case of Bastard Children*. London: J. Callow, 1815.
- Mead, Richard *A mechanical account of poisons in several essays.*, 4th ed. Dublin: printed by S. Powell, for George Ewing. 1736 *Eighteenth Century Collections Online*.
- Unknown, *The VVhole Business of Sindercome, from First to Last*, . London, Printed by Tho. Newcomb 1657 <http://search.proquest.com.ezproxy.library.uvic.ca/books/vvhole-business-sindercome-first-last-being/docview/2240917286/se-2?accountid=14846>.
- Unknown, *The tryal of spencer cowper, esq, john marson, ellis stevens, and william rogers, gent*. London, Printed for Isaac Cleave, Matt. Wotton, and John Bullord. <http://search.proquest.com.ezproxy.library.uvic.ca/books/tryal-spencer-cowper-esq-john-marson-ellis/docview/2241001312/se-2?accountid=14846>
- Unknown, *A Narrative of the Disease and Death of the Noble Gentleman John Pym Esquire*, (London, Printed for John Bartlet. 1643.) <http://search.proquest.com.ezproxy.library.uvic.ca/books/narrative-disease-death-noble-gentleman-john-pym/docview/2248533235/se-2?accountid=14846>, 1
- Unknown, *The trial of John Donellan, Esq*. London: MDCCLXXXI. [1781]. *Eighteenth Century Collections Online*. <https://link.gale.com/apps/doc/CW0123772263/ECCO?u=uvictoria&sid=ECCO&xid=ffd6a125&pg=29>,
- W. H., fl. 1634. *The true picture and relation of prince henry*, Leiden, Printed by William Christian, <http://search.proquest.com.ezproxy.library.uvic.ca/books/true-picture-relation-prince-henry-his-noble/docview/2240897038/se-2?accountid=14846>
-

Secondary Sources

- Aggarwal, Ankur. “The Evolving Relationship between Surgery and Medicine.” *AMA Journal of Ethics* 12, no. 2 (2010): 119–23. <https://doi.org/10.1001/virtualmentor.2010.12.2.mhst1-1002>.
- Atkinson, Ernest G. *The Cardinal of Châtillon in England, 1568–1571 : a paper read on 13 November 1889, before the Huguenot society of London* *Proceedings of the Huguenot Society of London* (in English and French). Volume 3. London: Huguenot Society of London. 1892. 172–285
- Barry, Jonathan. “Educating Physicians in Seventeenth-Century England.” *Science in Context* 32, no. 3 2019: 353–53. <https://doi.org/10.1017/s026988971900022x>.
- Beam, Sara. *The Trial of Jeanne Catherine: Infanticide in Early Modern Geneva*. Toronto: University of Toronto Press, 2021.
- Beattie, J. M. “Scales of Justice: Defense Counsel and the English Criminal Trial in the Eighteenth and Nineteenth Centuries.” *Law and History Review* 9, no. 2 (1991): 221–67. <https://doi.org/10.2307/743649>.
- Bellany, Alastair, and Thomas Cogswell. *The Murder of King James I*. New Haven, Conn: Yale University Press, 2015.
- Devereaux, Simon. “From Sessions to Newspaper? Criminal Trial Reporting, the Nature of Crime, and the London Press, 1770–1800.” *The London Journal* 32, no. 1 (2007): 1–27. <https://doi.org/10.1179/174963207x172939>.
- Forbes, T.R. “Percivall Pott Performs a Postmortem.” *Bulletin of the New York Academy of Medicine* 51, no. 2 (1975): 272–76.
- Harley, David. “Political Post-Mortems and Morbid Anatomy in Seventeenth-Century England.” *Social History of Medicine* 7, no. 1. 1994: 1–28. <https://doi.org/10.1093/shm/7.1.1>.
- Herman, Eleanor. *The Royal Art of Poison: Fatal Cosmetics, Deadly Medicines, and Murder Most Foul*. London: Duckworth, 2019.
- Holmes, Grace, Frederick Holmes, and Julia McMorrough. “The Death of Young King Edward VI.” *New England Journal of Medicine* 345, no. 1. 2001: 60–62. <https://doi.org/10.1056/nejm200107053450111>.
- IUPAC. *Compendium of Chemical Terminology*, 2nd ed. (the "Gold Book"). Compiled by A. D. McNaught and A. Wilkinson. Blackwell Scientific Publications, Oxford (1997). XML on-line corrected version: <http://goldbook.iupac.org> (2006-) created by M. Nic, J. Jirat, B. Kosata; updates compiled by A. Jenkins. ISBN 0-9678550-9-8. <https://doi.org/10.1351/goldbook>.
- Landsman, Stephan. “One Hundred Years of Rectitude: Medical Witnesses at the Old Bailey, 1717–1817.” *Law and History Review* 16, no. 3. 1998. 445–94. <https://doi.org/10.2307/744241>.
- Langbein, John H. *The Origins of Adversary Criminal Trial*. Oxford: Oxford University Press, 2010.
- Loar, Carol “Medical Knowledge and the Early Modern English Coroner's Inquest”, *Social History of Medicine*, Volume 23, Issue 3, December 2010, pp. 475–49, <https://doi-org.ezproxy.library.uvic.ca/10.1093/shm/hkq010>

- Lodge, Edmund. *Portraits of Illustrious Personages of Great Britain: Engraved from Authentic Pictures in the Gallerie of the Nobility and the Public Collections of the Country: with Biographical and Historical Memoirs of Their Lives and Actions*. London: Harding and Lepard, 1835.
- McKenzie, Andrea. “‘His Barbarous Usages’, Her ‘Evil Tongue’: Character and Class in Trials for Spouse Murder at the Old Bailey, 1674-1790.” *American Journal of Legal History* 57, no. 3 (2017): 354–84. <https://doi.org/10.1093/ajlh/njx016>.
- McMahon, Vanessa. *Murder in Shakespeare's England*. London: Hambledon Continuum, 2006.
- Moore, Norman, and G. W. Prothero. *The Illness and Death of Henry Prince of Wales in 1612: a Historical Case of Typhoid Fever*. London: Printed by J.E. Adlard, 1882.
- Phillips, Bianca, and Beng Beng Ong. “‘Was the Infant Born Alive?’ A Review of Postmortem Techniques Used to Determine Live Birth In Cases of Suspected Neonaticide.” *Academic Forensic Pathology* 8, no. 4 (2018): 874–93.
- Richardson, Ruth. *Death, Dissection and the Destitute*. Chicago: Univ. of Chicago Press, 2009.
- Roughead, William. *Trial of Mary Blandy*, 1914.
- Ratnaik, R N. “Acute and Chronic Arsenic Toxicity.” *Postgraduate Medical Journal* 79, no. 933 (2003): 391–96. <https://doi.org/10.1136/pmj.79.933.391>.
- Sharpe, James, and J.R. Dickinson. “Coroners' Inquests in an English County, 1600–1800: A Preliminary Survey.” *Northern History* 48, no. 2. 2011: 253–69. <https://doi.org/10.1179/007817211x13061632130520>.
- Tucker, Holly. *City of Light, City of Poison: Murder, Magic, and the First Police Chief of Paris*. New York: W.W. Norton & Company, 2018.