Poisoning during the Renaissance: The Medicis and the Borgias

F.P. Retief and L.Cilliers

The Medicis and Borgias were probably the most eminent families of the Italian Renaissance—known for their enthusiastic support of emerging arts and science. In popular history they have also gone down as ruthless rulers and infamous poisoners. Our assessment of the extent and nature of their poisoning showed that they were indeed products of an era characterized by intrigue, violence and assassination—but that their roles as poisoners have probably been exaggerated. Knowledge of poisons had improved little since Roman times and there was still a close association between witchcraft, sorcery and poisoning—but arsenic had become the most popular poison. An absolute inability to detect human poisoning chemically before the eighteenth century added to uncertainty, suspicion and common accusations of suspected poisoning, which could subsequently not be proved or disproved in the majority of cases. There is limited evidence of Medici involvement in poisoning, with the possible exception of Catherine de Medici, Queen of France, who collected poisons, frequented astrologers, wizards, and known poisoners, and could well have poisoned a limited number of her enemies. One prominent Medici, Ipolito, died of poisoning. The Borgias were involved more directly, although even here their legendary prowess with 'cantarell' powders (probably arsenical compounds) is probably much overstated. Pope Alexander VI (Rodrigo Borgia) had a reputation of *inter alia* poisoning five of his cardinals for their wealth; there may be truth in some of these allegations. His illegitimate son, Cesare Borgia, was ruthlessly ambitious, but his many victims died of strangling and stabbing rather than poisoning. The 'infamous' Lucrezia Borgia (sister of Cesare) was a pawn in the power of her father and brother, and not a significant poisoner.

The Medicis and the Borgias were probably the most eminent families of Renaissance Italy. To a large extent they shaped the transition from the Dark Middle Ages to the European era of enlightenment through their enthusiastic support of the emerging arts and rational science, but in popular history they have also gone down as ruthless rulers and infamous poisoners. The Renaissance had an ethic and morality very different from the accepted norms of modern democracies. Double dealing and intrigue were regarded as an integral part of politics and war—violence and assassination were commonplace. The contemporary Florentine historian Francesco Guicciardini wrote: 'All states are violent; no ruling power is

legitimate; the emperor who takes his (legitimacy) from Roman authority is the greatest usurper of all; princes' violation is twice as great since they subjugate us to their will with temporal and spiritual weapons' (Brion 44).

This article attempts an objective assessment of the extent and nature of poisoning during these times, with specific reference to the role played by the Medici and Borgia families.

THE MEDICI FAMILY

This remarkable family of Tuscan peasant origin, ruled Florence (and later Tuscany) for most of the period between 1434 and 1737, at a time when Florence, of all the Italian city states, was the star of Renaissance achievement. They produced four popes (Leo X, Clement VII, Pius IV and Leo XI) and married into the royal families of Europe, most notably in France, where they provided two queens, Catherine de Medici and Marie de Medici. Three family lines successively approached or acquired positions of power. The line of Chiarissimo II failed in the fourteenth century. In the fifteenth century the line of Cosimo the Elder established a power base in Florence with various efficient rulers, of whom Lorenzo the Magnificent was most prominent. Catherine, granddaughter of Lorenzo, became queen of France as wife of Henry II. In the sixteenth century a third line renounced republican ideals, imposed a tyranny and its members became the grand dukes of Tuscany. In all the Medicis there was a remarkable persistence of hereditary traits. They were diplomats rather than soldiers, and the early Medicis in particular courted the favour of the common people as *'popolani'* (plebeians). Furthermore, they were consumed with a passion for building projects, arts and literature. They were, as a family, quite outstanding as enlightened and successful patrons of art.

In spite of popular generalizations in history (Smith 153-167; Bloch 761-764), there is limited evidence of direct Medici involvement in poisoning. Poisoning was, however, part of the social fabric of Renaissance Italy (Ritchie 20; Editorial 173). In Venice, for instance, a Committee of Ten sanctioned poisoning as a tool of government, and kept official records of victims eliminated in this way (Smith 157-8). In Rome a school of poisoning developed in the fifteenth century and it is recorded that no one felt safe from being poisoned. Later, during the seventeenth century, a secret society of women who specialized in poisoning their husbands, was run by one Hieronyma Spara (Editorial 172). At the same time Naples became known for its professional poisoners, of which a woman by the name of Toffana was famous for her fatal 'Agua Toffana' and 'Acquetta di Napoli', often sold as cosmetics (Editorial 172). Much of this was probably initiated by Giovanni Porta's 1589 publication which not only listed available poisons, but also described how they should be used (Smith 157-

8).

The following incidents of actual or suspected poisoning are associated with the Medicis (in many cases they were victims and not perpetrators): When Cosimo the Elder was incarcerated by the Albizzi in 1433, he insisted (successfully) that his food should be prepared by friends, to avoid being poisoned (Hibbert 35). During the Pazzi plot against Lorenzo the Magnificent (1478) an early poisoning attempt was abandoned. He was subsequently stabbed in the neck and in order to counteract suspected poisoning of the dagger, blood was sucked thoroughly from the wound (Hibbert 118). At the age of 42, after years of severe gout, Lorenzo's health failed rapidly. With death approaching, his doctor, Leoni, was joined by a Lombard physician who prescribed a concoction of pulverized pearls and precious stones. Lorenzo lapsed into a coma and died a few days later. Distressed by accusations of witchcraft and poisoning, Leoni committed suicide by throwing himself down a well. Lorenzo had almost certainly died of natural causes (Hibbert 157-8).

The Medici pope Leo X suffered from severe anal abscess formation which did not respond to an operation. Cardinal Petrucci and collaborators plotted to kill him with poisonous bandages applied to his anal ulceration, but the plot was uncovered and the conspirators convicted (Hibbert 217). In 1521 his death was attributed to poisoning—his cupbearer was arrested and tried for murder, but eventually acquitted (Brion 155). He probably died of disease. The only prominent Medici to die of poisoning was Ippolito, cardinal in Hungary and pawn in the civil strife in Florence, who died in 1535. His assassin, Giovanni Andrea, was subsequently stoned to death in his home town (Williamson 40).

When Grand Duke Francesco's charmless wife, Archduchess Joanna of Austria, died in 1578 and he married his attractive mistress, Bianca Capello, the Florentines turned against their ruler and accused Bianca of possessing the evil eye and poisoning Joanna. Francesco went into seclusion and spent his time involved in chemistry and alchemy. This led to further vilification and accusations that he was preparing poisons to be used by the witch, Bianca. When they died simultaneously in October 1587 (almost certainly of malaria), it was generally assumed that their deaths were suicide by poison (Hibbert 260). Malaria is an ancient disease, probably the commonest cause of fatal febrile illness in Classical times, and endemic in Mediterranean countries up to the eighteenth century. The modern name, meaning 'bad air', was coined by Torti in Italy in 1718 (Wain 309; Retief & Cilliers 21).

The Medici most commonly associated with poisoning was Catherine de Medici, wife of Henry II of France, who played an important role in French politics and mothered three kings of France. She was undoubtedly a cold and calculating ruler, probably responsible for the St Bartholomew's Day massacre of Huguenots in 1572. Critics claim that she introduced the

refinements of the Italian art of poisoning to the French court, that she was a brutal sadist and used French government money to fund Italian agents, like the Florentine René, to attempt the poisoning of Protestant leaders such as Condé and Coligny (Ritchie 22; Smith 158; Sichel 77-78). She did keep a collection of poisons, believed in necromancy, and frequented wizards and astrologers, of which her favourite was the infamous Italian, Ruggieri (Sichel 153, 212-222), as well as an Italian hosier and perfumer, a known artist in poisoning (Sichel 142-3). She was probably responsible for the poisoning of Coligny's brother, d'Andelot, in 1567, and the aborted poisoning attempts on the Marshals, Montmorency and Cosse, in 1574 (Sichel 77, 78, 153, 212-222). However, she was probably innocent of accusations of poisoning Cardinal de Châtillon, Jean (Queen of Navarre), the Dukes de Longeville and Buillon (his doctor was hanged for his murder), Prince Poitier (Sichel 153), Maréchal and Blencon (Sichel 327, 343).

THE BORGIA FAMILY

Descendants of a noble Spanish Catalan family (Borja), the Borgias became prominent in Italian political and ecclesiastical affairs in the fourteenth century. They produced two popes (Calistus III and Alexander VI) and many able leaders, but achieved a reputation for treachery and immorality. Four Borgias were historically noteworthy: Alfonso Borgia established the family influence in Italy and became Pope Calistus III; Rodrigo Borgia became Pope Alexander VI; Cesare Borgia, illegitimate son of Rodrigo, became an influential, ruthless military and political figure, idealized by Machiavelli as 'the Prince' in his famous publication; Lucrezia Borgia, illegitimate daughter of Rodrigo (sister of Cesare), was known as patron of the arts and for her skill at political intrigue. The family started to decline in the sixteenth century and disappeared by the middle of the eighteenth century.

The Borgias were responsible for and suspected of a large number of assassinations, many by poisoning. Their reputation as poisoners was strengthened by the belief that they never travelled without a supply of poisons, and their infamous cantarella powders in particular, which were said to be capable of inducing instantaneous as well as delayed death (Portigliotti 87; Collison-Morley 235). However, in his diary of daily life in the Vatican, Burchard, Alexander VI's master of ceremonies, does not describe any cases of poisoning.

Pope Calistus III was elected at the age of 78 and reigned for only three years. He suffered severely from gout and spent much of his pontificate in bed. His active advancement of family members into positions of power was much resented, but there is no evidence of assassination by poisoning. He is also remembered for reversing the condemnation of Joan of Arc, and declaring her innocent (Maxwell-Stuart 146, 147). Lucrezia Borgia was a product of her time, intelligent and skilled in the art of survival, but as far as accusations of crimes and excesses are concerned, she was a pawn in the power play of her father, pope Alexander VI, and her brother, Cesare, rather than a prime mover. She was later accused of incestuous relations with both her father and her brother, Cesare. The infamous reputation of the Borgias rests primarily on the shoulders of Alexander VI and Cesare Borgia, and the following incidents of poisoning or suspected poisoning are related to their achievements:

In 1490 Prince Djem, brother of the Turkish sultan and political pawn as prisoner of the Pope, died under somewhat suspicious circumstances. Poisoning by the Borgias was mooted but it is more likely that he died of a respiratory infection (Collison-Morley 65).

In 1498 Aranda, Bishop of Calahorra, was imprisoned on the charge of being a secret Hebrew and his subsequent death in jail was attributed to poisoning. However, there is good evidence that he died of injuries when the roof structure collapsed on him (Collison-Morley 101). At approximately the same time the Orsini family accused the Pope of poisoning one Virginio after imprisonment (Collison-Morley 71). Cesare Borgia was also suspected of murdering Cardinal Juan Borgia by means of a slow poison administered three weeks before his death. The Cardinal in fact died of a severe feverish illness. A man arrested for sending a poisoned letter to the Pope admitted his 'guilt' only after torture (Collison-Morley 124).

In 1500 Don Alfonso Bisceglia, husband of Lucrezia Borgia, was severely wounded in an assassination attempt, probably orchestrated by her brother, Cesare. She nursed him with great care, expecting the assassins to come back with poison. In the end Cesare had him strangled while still in bed (Collison-Morley 129).

It was widely rumoured that Alexander VI murdered his wealthy

cardinals in order to gain access to their possessions (Collison-Morley 230-237). The Cardinal of Capua (nephew of the Pope) died of suspected poisoning in 1500 and his total inheritance went to the Pope (Portigliotti 75). In 1502 Cardinal Modena died suddenly without a will and the Borgias confiscated all his benefits. His secretary, Pinzon, suspected of poisoning him, received a gratuity from Alexander. Two years later the new Pope (Iulius II) deprived Pinzon of this gift, thus strengthening the suspicions of foul play by his predecessor (Portigliotti 74; Collison-Morley 91). Cardinal Orsini, old, ill and virtually blind, was arrested by the pope and died in prison after apparently 'going mad'. It was suspected that he died of cantharide poisoning, but the doctors diagnosed death by natural causes and the Pope gave him an excellent funeral (Collison-Morley 230). When Cardinal Mihiel died in 1503, it was again a financial windfall for AlexanderVI. Under Iulius II the Cardinal's secretary admitted under torture that he had poisoned his master on orders of the Borgias (Collison-Morley 234). Cardinal Monreale, another nephew of Alexander VI, died 16 days before the Pope; again his wealth went to the Vatican, and poisoning was rumoured (Portigliotti 76). There is probably truth in some of these allegations, and the deaths of Orsini, Modena and Mihiel in particular (Portigliotti 87-97; Mallett 202).

Alexander VI died at the age of 72 years in 1503 under circumstances which again (and almost certainly erroneously) led to rumours of poisoning. After a dinner prepared for a visiting Cardinal de Corneto, most guests fell ill, including the Pope and Cesare. The latter recovered after a long and serious illness. Initially the Pope was not very ill, but then his condition deteriorated gradually—he developed a tertian fever and died on the thirteenth day, most probably of malaria (Collison-Morley 238). According to the poisoning theory, Alexander VI had planned to poison the Cardinal, but the latter bribed the servants and the Pope was made to swallow his own poison (Maxwell-Stuart 164). In view of the fact that most guests fell ill, it is very likely that this was a case of acute food poisoning.

The new Pope, Iulius II, did not support Cesare Borgia and he gradually fell from grace. In 1506 it was suspected that Cesare was responsible for poisoning Philip of Austria (son of Maximilian). He was exiled to Spain and fell in battle in 1507 at the age of 31 (Collison-Morley 269).

POISONS AND POISONING

Knowledge about poisons and poisoning, along with scientific knowledge in general, progressed little in the millennium which separated Classical times from the Renaissance. Ignorance and superstition was rife and in the popular mind there was still a close association between sorcery and poisoning (Ritchie 21-30). When a prominent person died unexpectedly, death by poisoning was regularly mooted—and particularly so when notorious individuals like the Borgias were in any way implicated (Mallett 202). The Forensic Sciences had not progressed since Roman times. In the fourteenth and fifteenth centuries it was still virtually impossible to prove death by poisoning, even at autopsy. When Pope Alexander VI died in 1503 the rapid decomposition of his obese body was still mentioned as evidence against poisoning (Collison-Morley 238). As late as the seventeenth century, when the French court experienced a rash of sophisticated poisoning (Mitford 83-93), kings like Louis XIV regularly asked for post mortem examinations to bring respectability to the court's public image (Ritchie 28), but contemporary doctors could not really detect poisons (Fischer-Homberger 3404).

Paracelsus (1493-1541) laid the foundation of scientific toxicology when he differentiated between the chemical effects of a poison, and those symptoms caused by superstitious overlay. He also showed that the toxic properties of a substance were a function of its dose—thus differentiating between the beneficial and harmful effects of drugs. Ambroise Paré (1510-1590), the outstanding surgeon of the Renaissance, contributed towards demystifying poisons and poisoning, and at the onset of the seventeenth century Paulus Zacharias (1584-1659) contributed greatly by properly reviewing existing knowledge of drugs and poisons and by disproving the claimed fatal effects of malicious incantations. Wepfer (1620-1695) further unravelled the chemistry of drugs, and in 1761 the great pathologist, Morgagni, stated that poisoning could only be proven by demonstrating the poison in the victim (Fischer-Homberger 3399). The proper chemical recognition of poisons only followed in the eighteenth century (Campbell 202-3), and as late as 1793 arsenic poisoning was still popularly diagnosed by detection of a so-called characteristic garlic odour in the victim's gastric contents (Fischer-Homberger 3405).

In the time of the Medicis and the Borgias popular poisons still included substances with mythical powers, like bull's blood, menstrual blood, nail parings, lobster claws, toad flesh, cat hair, bat hearts and 'sea-hares' (Fischer-Homberger 3403). Poisonous plants were still those recorded by Dioscorides (1st century AD). In 1589 Giovanni Porta of Naples published a book on the art of poisoning and recommended belladonna, henbane, aconite, hellebore, nux vomica, etc. as potent poisons

(Smith 157). Cantharide was known to be toxic for man. Mineral poisons included mercury, antimony, lead and corrosive sublimate—but a prominent addition since classical times was arsenic, probably the most popular poison of the Renaissance (Ritchie 21-22; Fischer-Homberger 3404).

Clearly, mineral poisons were now replacing the predominantly plant poisons of classical times. The rising interest in chemistry and alchemy provided an additional impetus for a proliferation of mineral poisons (Portigliotti 71-76; Ritchie 21-30). It was said that the Florentine perfumers were adept at mixing arsenic into food and sweets (Editorial 174).

A large number of antidotes against poisoning were in vogue. These varied from poison-specific antidotes to time-honoured universal antidotes like mithridatum and theriac. Their efficiency had not improved since classical times but most of them were at least not harmful (Ritchie 21-30).

DISCUSSION

It has been said that in Renaissance Italy poisoning was recognized by churchmen as a means of preferment, by statesmen as a useful political instrument, and even by governments as an engine of diplomacy (Editorial 173). However, there is good reason to believe that the efficacy of poisoning as practiced in the time of the Borgias and Medicis has been overstated. Rumour, superstition and fear of witchcraft, closely associated with poisoning, amplified the supposed action of poisons. Belief in poisoned gloves, slippers and flowers as potent instruments of death, for instance, was certainly mythical (Editorial 172). The position was aggravated by the incompetence of the Medieval and Renaissance doctor who seemed powerless against the halo of mystery surrounding poisoning and wizardry (Ireland 52-61). The basic principles of how poisons worked were not understood—and in particular the concept of dose-related effectivity (Fisher-Homberger 3400; Collison-Morley 230-237). Poison mixtures probably often consisted of multiple toxins, and there is good reason to believe that arsenic was very popular (Ritchie 21-30).

Arsenic toxicity was known to the ancients, but potent derivatives, like white arsenic (arsenious acid) and yellow arsenic (orpiment), were then cumbersome to prepare. With the development of chemistry these substances became more easily available, and from the fourteenth century onward arsenic acquired notoriety as poison (Fischer-Homberger 3402). Virtually tasteless and odourless (except for a faint smell of garlic) it was easily mixed with food and drink. In France it was occasionally administered by enema, even in combination with other poisons like opium, cantharides, mandragora and corrosive sublimate. Shirt tails were soaked in arsenic (or corrosive sublimate and cantharides) in order to produce a

violent contact dermatitis which facilitated skin absorption of the poison or forced the patient to bed, where other poisons could more easily be administered (Editorial 175). It was claimed that the Borgias fortified their poisons by feeding arsenic to toads in order to use the urine, but this might well be anecdotal (Mallett 202). They did apparently add arsenic to the decomposing flesh of toads and other animals and then tapped the fluid oozing from the carcasses. These mixtures might well have contained infectious organisms or bacterial toxins in addition to the arsenic (Editorial 176).

The composition of the Borgias' white cantarella powders is not known with certainty (Mallett 202) but it is generally believed to have consisted mainly of arsenic. They might well have contained other poisons, including products of putrefaction. The word 'cantarella' actually refers to cantharides. Although the Borgias had little knowledge of chemistry, the potency of their poisons was said to have been tested on animals or slaves (Portigliotti 87-97; Editorial 174).

When the poisoning history of the Medicis and Borgias is compared, it is evident that the Medicis had the cleaner slate, with the possible exception of Catherine de Medici. However, also her reputation for murder by poison is largely unsubstantiated, with the possible exception of the death of d'Andelot, and the aborted murder attempts on Montmorency and Cosse (Sichel 77, 78, 153, 212-222; Héretiér 43-59). With the Borgias the evidence is more compelling, but again modern scholars doubt their legendary prowess as poisoners. Cesare Borgia, in particular, assassinated most of his victims by stabbing and strangulation, not by poisoning (Collison-Morley 230-7; Mallett 202). Of all the deaths attributed to Alexander VI and Cesare, it is suggested by Portigliotti (87-97) and Collison-Morley (235) that only those of Cardinals Orsini, Medena and Mihiel should be seriously considered. Mallet (202) believes that only Mihiel was poisoned, and points out that even then the condemned poisoner only admitted under torture.

According to a contemporary historian, Paolo Giovio, Orsini was poisoned with cantharide (not cantarella powder) which caused terminal insanity (Collison-Morley 230). Cantharide, however, like arsenic, does not characteristically cause psychological aberrations. This would be more typical of poisons like henbane, datura or deadly nightshade (Retief & Cilliers 17).

Owing to our lack of accurate scientific information about the causes of mortality in the Renaissance, and in particular the inability of physicians to diagnose poisoning with any degree of accuracy, the true extent of poisoning will never be known. Accusations of execution by poisoning levelled against unpopular rulers could be neither proved nor disproved in the vast majority of cases—and rumours were quite probably used as tools

of aggression against people in powerful positions. Popular history will probably continue to label the Medicis and Borgias as notorious poisoners at a time when Italy was known as a 'classic land of poisons' (Portigliotti 95). But even this statement may be less than factual when we note that the death-penalties recorded in Florence between 1328 and 1759 included six incidents of poisoning—and in only one case did the condemned cause the death of more than one victim (Portigliotti 87-97).

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Professors F.P Retief and L. Cilliers
Department of History
University of the Free State
P O Box 339
Bloemfontein 9300