Nephrol Dial Transplant (2008) 23: 3343–3349 doi: 10.1093/ndt/gfn198 Advance Access publication 11 April 2008

Special Feature



A kidney from hell? A nephrological view of the Whitechapel murders in 1888

Gunter Wolf

Department of Medicine, University of Jena, Jena, Germany

Abstract

In the poor Whitechapel district of the East End of London in the fall of 1888, at least five prostitutes were brutally murdered, and in all but one case, also mutilated. The murderer was never caught and became known by his nickname 'Jack the Ripper'. The left kidney and the uterus were cut out and taken away from one of the victims named Catherine Eddowes. A kidney was also cut out of the body from another victim, but not taken away. Two weeks later, George Lusk, president of the Whitechapel Vigilance Committee, received a small cardboard box with half of a longitudinally divided kidney and a letter entitled 'From hell' claiming that the kidney inside the box was taken from the victim. The kidney was brought to Dr Thomas Horrocks Openshaw, the Curator of the London Pathological Museum, where the kidney could be microscopically examined. The press jumped on the topic and made a circumstantial case that this kidney had been indeed torn from the body of Catherine Eddowes. According to the later memoirs of Major Henry Smith of the City Police published more than 20 years after the incident, the kidney left in the corpse of Catherine Eddowes was in an advanced stage of Bright's disease and the kidney sent to George Lusk was in exactly a similar stage. Today, the majority of criminologists believe that the kidney sent to Mr Lusk was a hoax as were other letters signed with Jack the Ripper. However, the murderer took organs from his victims, and in the case of Catherine Eddowes, the kidney. Serial killers often mutilate their victims and abscond with the removed body parts as trophies. By removing the kidney from Catherine Eddowes, Jack the Ripper may have tried to take possession of the conscience, emotions and desires of one of his victims, attributes residing in the kidney as described in the Bible. Jack the Ripper was never caught; many suspects have been suggested, and the murder series ended as suddenly as it had begun. We will never know who this mentally disturbed 'nephrophilic' was. Today, the story of Jack the Ripper is part of contemporary culture.

Correspondence and offprint requests to: Gunter Wolf, Department of Internal Medicine III, Friedrich Schiller University, Erlanger Allee 101, D-07740 Jena, Germany. Tel: +49-3641-9324301; Fax: +49-3641-9324302; E-mail: gunter.wolf@med.uni-jena.de

Keywords: Bright's disease; history of nephrology; Jack the Ripper; kidney; serial murder

Introduction

In Great Britain, the problems of unemployment and poverty were chronic in the 1880s. London, then the biggest city on earth, had almost 4 million inhabitants in 1881. Although there existed incredible wealth in this city and social improvement had made life better than ever for some, there were many poor people. Fewer than 7000 people owned four-fifths of the land and the majority of the population was exploited by the wealthy upper class. In London, these poor people were mainly living in the Whitechapel district of the East End. The population of Whitechapel was \sim 80 000 people, three-quarters being women and children. Many of the men were unemployed or obtained work on a casual day-to-day basis as building workers, carters, dockworkers and coal porters. Here, work for women included scrubbing floors, laundry, needlework, shelling peas or making matchboxes for a few pennies. Not surprisingly, many women supplemented their income by prostitution. The Metropolitan Police estimated that \sim 1200 prostitutes lived in Whitechapel in 1888. The American writer, Jack London, visited the poverty-stricken East End in 1902 and wrote a book entitled The People of the Abyss [1]. He describes society's inhumanity in this book:

Where you and I would not care to have our wives pass their lives in a place where no other man's wife should have to pass her life. For here, in the East End, the obscenities and brute vulgarities of life are rampant. There is no privacy. The bad corrupts the good, and all fester together. Innocent childhood is sweet and beautiful; but in East London innocence is a fleeting thing, and you must catch them before they crawl out of the cradle, or you will find the very babes as unholy wise as you. [1]

Figure 1 shows Commercial Street of the Whitechapel district. It is not surprising that violence against women was a daily occurrence in such a social climate. But what happened in the Whitechapel district in the fall of 1888 was without precedence.

3344 G. Wolf



Fig. 1. A historical photography of Commercial Street of the Whitechapel district around 1888.

The victims

The murderer, later known as Jack the Ripper, killed at least five women from August to November of 1888 [2]. Although it is debatable that other women before August and after November may have been victims of Jack the Ripper, and the Scotland Yard's 'Whitechapel Murders' files included an additional six suspected victims, it is generally assumed that the canonical five victims (Mary Ann Nichols, Annie Chapman, Elisabeth Stride, Catherine Eddowes, Mary Kelly) were killed by the same person. This is based on the similarities and circumstances as to how the women were murdered. All victims were very poor and worked as part-time prostitutes [3]. The crimes were extraordinarily violent and the victims were severely mutilated. The killings produced, not surprisingly, an atmosphere of indescribable panic in the East End. Excited crowds gathered at the scene of the crimes and more than one man had to be rescued by the police from a violent mob thinking they might have caught Jack the Ripper. As suddenly as the slaying series started, they stopped. The police files were closed in 1892. No murderer was arrested and it was reasonably assumed that the Ripper was either dead or at least no longer active [4].

The presumed first case of the murder series was Mary Ann Nichols who was found by a horse-cart driver at 3.40 a.m. on 31 August 1888 in a narrow East End street called Buck's Row. The woman was found lying on her back with her skirts raised to her abdomen. Her throat was cut almost from ear to ear severing the gullet and windpipe. The abdomen had been cut open from the centre of the base of the ribs along the right side and small stabs, apparently with a bladed knife, were made in the lower abdomen [5]. The second murder of a woman called Annie Chapman, another casual prostitute, took place in the backyard of 29 Hanbury Street on the morning of 8 September 1888. The 37-year-old woman was found with a swollen face and tongue, suggesting first strangulation and a throat cut through to the spine. Inspector Chandler who handled the case sent for Dr George Bagster Phillips, the divisional police surgeon. Phillips examined the body and found that portions of the small intestines and of the abdomen were



Fig. 2. A contemporary photograph of Mitre Square where Eddowes was murdered. The picture is from Evans and Rumbelow [7].

lying on the ground over Chapman's right shoulder, but still attached to the body. Part of the abdominal wall with the navel, the uterus, the upper part of the vagina and parts of the bladder were removed and missing. Dr Phillips thought that the injuries appeared to have been made by someone who had considerable anatomical knowledge and skill because the uterus had been removed by one who knew how to find it. In Dr Phillip's opinion, the injuries to the throat and abdomen were made with a very sharp knife, probably with a thin narrow blade at least 6-8 inches long. The police officers agreed that Annie Chapman had been murdered by the man who had killed Mary Ann Nichols. Although a suspect named John Pizer was temporarily arrested because a leather apron was found at the scene of crime and it was wrongly assumed that this was Pizer's apron, no further suspects were suggested. Pizer had a solid alibi and was released. The somewhat gruesome turning point in the story of the Whitechapel murders occurred the night between 29 and 30 September 1888 when two killings were committed in the early Sunday hours. The first victim of this double event was Elisabeth Stride, a 45-year-old casual prostitute who originally came from Sweden, and had long ago taken to the streets to earn a living. Stride was found inside the gateway of 40 Berner Street, the residence of the socialist International Working Men's Educational Club, by the club's steward, Louis Diemschutz, at 1 a.m. According to the medical examination and the subsequent postmortem investigation, there was a 6-inch incision in the neck that began on the left side. This cut nearly severed the vessels on the left side, cutting the windpipe completely, and terminated on the opposite side, but without leaving the vessels intact on this side of the neck. There were otherwise no further mutilations and the police speculated that the killer had been interrupted in his work. The second victim in this night was Catherine Eddowes, a 46-year-old woman who lived in a common lodging house in Dean Street and was also a part-time prostitute. At 1.45 a.m., she was founded brutally murdered and mutilated on a corner of Mitre Square, which borders Whitechapel and was under the control of the City of London Police. In Figure 2, a contemporary photograph of Mitre Square where Eddowes was murdered is shown. Dr Frederick Gordon Brown, the City of London police surgeon, arrived at Mitre Square at around 2 a.m. He found that Eddowes' throat was cut with the wound extending 7 inches from the left ear to \sim 3 inches below the

lobe of the right ear. The sternocleidomastoid muscle was divided and the cricoid cartilage was severed through the middle. The abdomen had been opened up from the pubic area to the sternum and the intestines had been pulled out and placed over the right shoulder. A 2-foot piece of the intestines had been detached and was lying on the ground between Eddowes' body and her left arm. The lobe and auricle of the right ear were cut obliquely through and there was a deep cut over the bridge of the nose detaching the tip of the nose. After Eddowes' body was brought to the mortuary, Dr Brown performed a postmortem examination. He discovered that the right kidney was pale and bloodless and there was a slight congestion of the base of the pyramids [4]. The peritoneal lining was cut through on the left side and the left kidney had been carefully taken out. The uterus was divided horizontally, leaving a ¾-inch stump. The rest had been taken away whereas the vagina was uninjured. Dr Brown thought the murderer possessed 'a good deal of knowledge as to the position of the organs in the abdominal cavity and the way of removing them' [4]. In Dr Brown's opinion, the first wound was to the throat and Eddowes must have been lying on the ground. He concluded that the abdominal mutilations and the removal of the organs, including the kidney, had been made after death. Moreover, Dr Brown was certain that there had been no struggle and the throat had been so quickly severed that the victim was unable to make any noise. Figure 3 shows a police drawing of Eddowes with her injuries inflicted by the murderer.

The last of the canonical five victims was a 25-year-old Irish prostitute, Mary Jane Kelly, who was killed on 8 November 1888 at 13 Miller's Court, north of Dorset Street. Kelly was found killed and mutilated by Thomas Bowyer, an assistant of Kelly's landlord who collected overdue rent. In contrast to the other victims, Kelly was killed inside her house. She was lying naked on her bed with her face hacked beyond recognition. The whole surface of the abdomen and thighs was removed. The abdominal cavity was emptied of its organs and the breasts were cut off. The organs were scattered around the corpse: the uterus and kidneys were placed under her head, but not taken away, the liver between the feet, the intestines by the right side and the spleen by the left side of the body. Skin flaps were found on the bedside table.

Sir Robert Anderson, the head of the police Criminal Investigation Departments, asked Dr Thomas Bond of the Great Western railway to write an assessment of the preceding cases, none of which he attended. Dr Bond was sure that all five women had been killed by the same hand because the throats of all victims had been cut in a similar way. All victims were presumably lying down when murdered. The mutilations of Nichols, Chapman, Eddowes and Kelly were, according to Dr Bond, all of the same character. The exception was Stride, and it has been suggested that the murderer was distracted before any mutilations could be performed. This may be the reason why the killer struck again soon afterwards. Alternatively, it has been proposed that Elisabeth Stride's murder was not connected at all to any of the other murders and she was not a Ripper victim. Although another woman was murdered in the following year in the Whitechapel district, the whole *modus operandi* made it unlikely that this unidentified woman was a Rip-

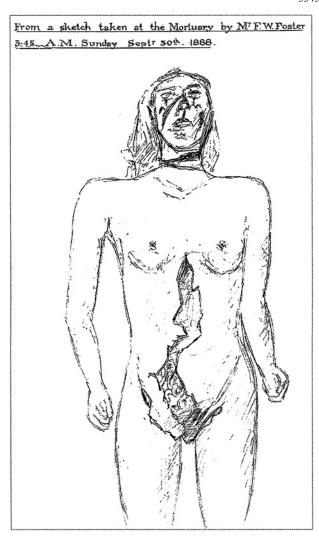


Fig. 3. Sketch of the body of Catherine Eddowes, drawn by Frederick W. Foster, the City Surveyor, for the inquest. The left kidney has been removed from Eddowes body by the murderer. The picture is from Evans and Rumbelow [7].

per victim [3]. The murder series stopped as suddenly as it had begun. The police had several suspects ranging from a cricket player named Montague John Druitt to a mentally disturbed Polish Jew called Aaron Kosminski [5], but the true identity of Jack the Ripper has never been clarified.

It has been proposed by the author Stephen Knight that Freemasons were involved in the killing because the victims were mutilated in accordance to the murder of Hiram Abiff, the Masonic Grand Master and builder of Solomon's temple [6]. According to the Masonic legend, the intestines were placed over the left shoulder of Abiff after he was killed. Unfortunately, Knights neglected to explain why the intestines had been placed on the right side of Stride and the whole theory was built on sand.

A letter from hell

The police received an estimated thousand letters per week at the peak of the murders. Many letters claimed to be purportedly written by Jack the Ripper. At the time, most were 3346 G. Wolf



Fig. 4. Mr George Lusk, who received a cardboard box containing pieces of a kidney with a letter. Lusk was the president of the Vigilance Committee and a well-known public figure in the Whitechapel district. The picture is from Evans and Rumbelow [7].

considered as hoaxes written by newspaper journalists trying to start a story or psychologically disturbed individuals trying to incite more public terror. On 16 October 1888, the builder and decorator George Lusk (Figure 4), who was the president of the Vigilance Committee, received a small cardboard box, wrapped in brown paper, which bore an indistinct London postmark [7]. Lusk opened the parcel and found inside a piece of stinking meat that he thought to be a longitudinally divided part of a kidney. Enclosed in the box was a letter (Figure 5): 'From hell. Mr. Lusk, Sir, I send you half the Kidne I took from one women prasarved it for you. Tother piece I fried and ate it was very nise. I may send you the bloody knif that took it out only wate a whil longer. Signed Catch me when you can Mishter Lusk'.

Although Lusk first took the letter and the gruesome contents of the box as a practical joke, he nevertheless decided to bring the affair to the attention of other members of the Vigilance Committee at a meeting the following day. After some hesitation, Lusk took the kidney to Dr Frederick Wiles at his surgery at 56 Miles End Road, but his assistant F. S. Reed examined the contents of the cardbox because Wiles was out. Reed thought that the kidney was human and had been preserved in spirits of wine. The assistant brought the kidney for further examination to Dr Thomas Horrocks Openshaw (Figure 6), curator of the Pathological Museum of the London Hospital. Dr Openshaw apparently examined the kidney microscopically and made far-reaching conclu-

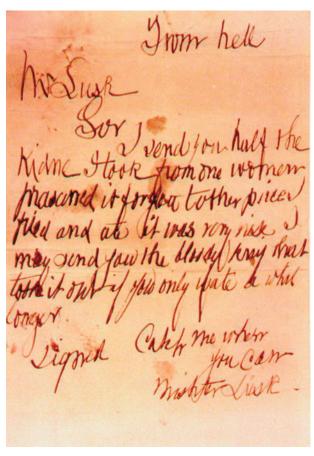


Fig. 5. This 'letter from hell' was in the parcel together with the human kidney.

sions. According to Reed, Dr Openshaw expressed the opinion that the kidney was human, belonged to a woman of \sim 45 years and that it was part of a left kidney. Furthermore, according to Mr Reed, Dr Openshaw pronounced the specimen as a 'ginny' kidney, one that had belonged to a person with alcohol abuse and had been removed in the last 3 weeks. However, Dr Openshaw was more conservative about his claims in an interview for the newspaper The Star the same day where he expressed the opinion that it was half of a left human kidney. There is even some evidence that Dr Openshaw never commented on the gender of the kidney and that all these claims were made up by Mr Reed. Lusk and the other members of the Vigilance Committee knew from the heavy press coverage of the Mitre Square murder that the left kidney of the victim was missing and handed the parcel and its contents over to the Leman Street police station and the matter was placed into the hands of Inspector Abberline. The Metropolitan Police sent it to their city colleagues and the kidney was reexamined by the City Police surgeon, Dr Gordon Brown. Unfortunately, a written report of Dr Brown's opinion did not survive and there is only second-hand evidence from Chief Inspector Swanson and Major Sir Henry Smith. Smith's account was published as an autobiography in 1910 and he wrote the following:

I made over the kidney to the police surgeon, instructing him to consult with the most eminent men in the profession,



Fig. 6. Dr Thomas Openshaw, curator of the Pathological Museum of the London Hospital, who initially examined the kidney received by George Lusk and pronounced it human. The picture is from Evans and Rumbelow [7]

and to send me a report without delay. I give the substance of it. The renal artery is about three inches long. Two inches remained in the corpse, one inch was attached to the kidney. The kidney left in the corpse was in an advanced state of Bright's Disease; the kidney sent me was in an exactly similar state. But what was of far more importance, Mr. Sutton, one of the senior surgeons at the London Hospital, whom Gordon Brown asked to meet him and another surgeon in consultation, and who was one of the greatest authorities living on the kidney and its diseases, said he would pledge his reputation that the kidney submitted to them had been put in spirits within a few hours of its removal from the body thus effectually disposing of all hoaxes in connection with it. [8]

This account of Major Smith, published more than 20 years after the event, would suggest that Dr Henry Gawen Sutton (1836–1891), lecturer in pathological anatomy at London Hospital and certainly an expert in renal diseases, was involved (Figure 7). Dr Sutton is best known for the co-discovery of the Gull–Sutton syndrome, arteriosclerotic fibrosis of the kidney, reported in a seminal paper in 1872 [9,10]. However, there is no direct evidence from Dr Sutton himself that he was involved in the examination of this kid-



Fig. 7. Dr Henry Gawen Sutton, who was claimed to be involved in examination of the kidney sent to George Lusk. Sutton is best known as the co-discoverer of arteriosclerotic fibrosis of the kidney (Gull–Sutton syndrome). The picture is from Cameron [11].

ney and we have only Major Smith's account. This does not necessarily imply that Smith made up the involvement of Dr Sutton because Sutton was a small, shy, studious, quiet, unambitious physician who was partially deaf [11]. He was an excellent lecturer, but a slow writer who published little [11]. Dr Sutton's hobbies were poetry and fishing and this modest man is often neglected in contrast to the famous Sir William Gull [9]. Thus, it would not be surprising that Sutton indeed examined the Lusk kidney, but never left anything in written form. As a corollary, it has been suggested in a somewhat strange story that Sir William Gull, together with the Prime Minister Lord Salisbury murdered the women to cover up the existence of an illegitimate child of Prince Albert Victor, the grandson of Queen Victoria, who had been in the care of Mary Kelly. This complex story is presumably a pure fiction.

What about Smith's statement that the kidney was in an advanced stage of Bright's disease being the counterpart of Eddowes' other kidney? Dr William Sanders, who also was present at the postmortem examination, said the following in an interview with the Manchester Evening News on 9 October:

You may take it that the right kidney of the woman Eddowes was perfectly normal in its structure and healthy and by parity of reasoning you would not get much disease on the left. The liver was healthy and gave no indication that the woman drank. Taking the discovery of a kidney

3348 G. Wolf

and supporting it to be human my opinion is that it was a student's antic. It is quite possible for any student to obtain a kidney for the purpose. [12]

In addition, at this time almost every chronic kidney disease was considered as Bright's disease [13,14]. A common perception also was that overindulgence of ardent sprits such as gin was the cause of Bright's disease [14,15]. Thus Bright's disease was not uncommon among the poor of the Whitechapel district; that the Lusk kidney showed symptoms does not prove that it was from Eddowes but could simply be coincidental. Finally, Major Smith's book, written long after the event, contains other incorrect statements, i.e. his clashes with Warren, and is presumably unreliable.

On 29 October, after the Eddowes inquest, Dr Openshaw received the following letter:

Old boss you was write it was the left kidney i was goin to hoperate agin close to your opitle just as i was goin to dror mi nife along of er bloomin throte them cusses if coppers spoilt the game but i guess i wil be on the job soon and wil send you another bit of innerds. Jack the ripper. O have you seen the devle with his microscope and scalpul a-looking at a kidney with a slide cocked up. [4]

Since the whole kidney story obtained heavy press coverage, the letter does not reveal any details known only to the murderer. Thus the question remains: was the kidney sent to George Lusk from Catherine Eddowes and were the letters indeed from the killer? It is not unreasonable to assume that the letters and the kidney were hoaxes. In the case of the letters that contain accepted facts, most of this information may have been obtained from the press attending the public inquests of the victims [16]. It appears beyond a reasonable doubt that the renal segment sent to George Lusk was human and this could be easily determined by morphological criteria in 1888 [15]. However, every medical student or person involved in the postmortem examination and/or with access to a mortuary could have obtained a human kidney. The kidney was preserved by alcohol suggesting that it may have been obtained earlier and may have been even part of a collection of anatomical specimens and was subsequently sent to Lusk after the press coverage of Eddowes' killing. There is even some, *albeit* indirect, evidence that the letters were written by journalists to keep the story boiling and to increase the circulation of the newspapers [12].

Why was a kidney removed from Eddowes' body?

The motives of serial murders can be controversially discussed. Hypotheses range from seeking sexual gratification to the achievement of power and control to the expression of anger [17,18]. The motives of serial murderers can never be exactly attributed. Serial killers often mutilate their victims and abscond with trophies—usually, body parts. Organs that are taken often have a special meaning to the murderer and may be considered objects of postmortem control of the victims. Jack the Ripper took organs from his victims with him; in several cases the uterus, once the heart, and in the case of Catherine Eddowes, the kidney. In the Hebrew tradition, the kidneys are considered to be the most important internal organ [19]. In the Old Testament, the kidneys are

associated with emotional life as the site of temperament, emotions, prudence, vigor and wisdom [20]. They are mentioned in the Bible as the organs examined by God to judge an individual [21]. By removing the kidney from Catherine Eddowes, Jack the Ripper may have tried to take possession of the conscience, emotions and desires of one of his victims. A kidney was also removed from Mary Kelly's body and placed under her head, perhaps suggesting the importance of this organ to the murderer to put it under the head of his victim. There is no evidence that this kidney was further examined.

It has been argued by some that Jack the Ripper was a member of the medical profession [22]. A medical doctor would have likely had knowledge of how to remove a kidney and may have known that in the biblical view, the kidneys were perceived as the source for moral yearning. Other have disputed these arguments [3] or have alternatively suggested that Jack the Ripper can be understood in terms of a doctor-identification born of one or more terrifying experiences he may have had with doctors during his childhood [23].

Conclusion

Jack the Ripper has been featured in a number of works of fiction and has certainly become part of popular culture as worthwhile raw material for many novels and films. There is vast literature on this subject including at least two regularly appearing journals, and the students of Jack the Ripper call themselves 'ripperologists'. Whoever the Ripper was, his identity remains a mystery despite many potential suspects. He was the murderer of at least five women, and is known for his grievous mutilations of the victims. By removing a kidney from one of these victims, possibly this murderer was exhibiting psychopathological behavior, an attempt to obtain control and possession of the victim even after death. Part of a kidney sent along with a letter by the presumed killer created a great press sensation, but this has generally been determined to be a macabre joke to maintain the Whitechapel community in a state of panic. The story of Jack the Ripper may tell us that the kidneys have a deeper mythical meaning as the seat of morality and ethics as mentioned in the Bible.

Conflict of interest statement. I have no conflict of interest and I am also not Jack the Ripper.

References

- London J. The People of the Abyss. London: Thomas Nelson & Sons, 1902. http://london.sonoma.edu/Writings/ PeopleOfTheAbyss/chapter19.html
- Rumbelow D. The Complete Jack the Ripper. New York: Penguin Books, 2004
- Marriott T. Jack the Ripper. The 21st Century Investigation. London: John Blake, 2007
- 4. Sugden P. *The Complete History of Jack the Ripper*. London: Robison, 2006
- 5. Begg P. Jack the Ripper. The Facts. London: Robson Books, 2006
- Knight S. Jack the Ripper: The Final Solution. London: George Harrap & Co., 1976
- Evans SP, Rumbelow D. Jack the Ripper. Scotland Yard Investigates. Phoenix Mill: Sutton Publishing, 2006

- Smith H. From Constable to Commissioner: The Story of Sixty Years, Most of Them Misspent. London: Chatto & Windass, 1910, 154– 155
- Newton NM, Fine LG. Inference of the existence of high blood pressure as a cause of renal disease in the mid-19th century: observations on vascular structures in the kidney. Am J Nephrol 1999; 19: 323–332
- Gull W, Sutton H. On the pathology of the morbid state commonly called chronic Bright's disease with contracted kidney ('arteriocapillary fibrosis'). *Med Chir Trans* 1872; 55: 325–371
- Cameron JS. Iconographic archives of European nephrology: arteriocapillary fibrosis (letter). Nephrol Dial Transplant 1999; 14: 2518– 2533
- DiGrazian CM. Another look at the Lust kidney. Ripper Notes 2000;
 15–21
- 13. Fine LG. Pathological specimens of the kidney examined by Richard Bright. *Kidney Int* 1986; 29: 779–783
- 14. Peitzman SJ. Bright's disease and Bright's generation-toward exact medicine at Guy's hospital. *Bull Hist Med* 1981; 55: 307–321

- 15. Warren NP. A postal kidney. Criminologist 1989; 13: 12-15
- Hastings N. When the people were in terror. *Ripper Notes* 2005; 21: 34–87
- 17. Eckert WG. The Whitechapel murders: the case of Jack the Ripper. Am J Forensic Med Pathol 1981; 2: 53–60
- Myeers WC, Husted DS, Safarik ME et al. The motivation behind serial sexual homicide: is it sex, power, and control, or anger? J Forensic Sci 2006; 51: 900–907
- 19. Maio G. The metaphorical and mythical use of the kidney in antiquity. *Am J Nephrol* 1999; 19: 101–106
- 20. Kopple JD. The biblical view of the kidney. *Am J Nephrol* 1994; 14: 279–281
- Eknoyan G. The kidneys in the Bible: what happened? J Am Soc Nephrol 2005; 16: 3464–3471
- 22. Kinnell HG. Serial homicide by doctors: shipman in perspective. *British Med J* 2000; 321: 1594–1597
- Shuster S. Jack the Ripper and doctor-identification. Int J Psychiatry Med 1975; 6: 385–402

Received for publication: 10.1.08 Accepted in revised form: 14.3.08