

## CASE REPORT

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### A Case of Strangulation with Postmortem Amputation of the Penis

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**ABSTRACT:** A case of homicide with postmortem amputation of the penis was described. The penis found later in a home freezer in the apartment of the culprit showed "zigzag" fit to the victim. In order to substantiate the morphological findings, phenotypes of three isozymes, phosphoglucomutase<sub>1</sub> (PGM<sub>1</sub>), phosphogluconate dehydrogenase (PGD), and esterase D (EsD) together with ABO blood type were determined in the skin of the penis amputated. All of the four genetic markers determined with the penis were the same as those determined with heart blood of the victim.

**KEYWORDS:** pathology and biology, strangulation, isozymes, isozyme typing, amputation of the penis

Trauma to the external genitalia is not unusual [1], and penile amputations are infrequently seen after self-inflicted trauma [2]. Under a special set of circumstances, a homicide involving amputation of the male genitalia might be seen. In Japan, four cases of this type of crime are known; three involved a single female and one a single male assailant who wanted to obtain exclusive possession of the male genitalia in the heat of passion.

The present communication describes a case of homicide in which the penis of the victim was absent from the scene of death. The penis was later found in a home freezer in the apartment of the culprit, and the morphological and genetic investigations were made for personal identification of the penis.

#### Case Report

On 25 June 1982, a 31-year-old male bar worker was found strangled to death in his apartment. The victim was lying naked from the waist down on his bed. Police, who were immediately called, found that the penis of the victim was missing. Upon request by police, an autopsy was performed on the body of the victim by one of the authors.

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The body was that of a well-nourished adult male, measuring 171 cm in height and 60 kg in weight. The hypostasis developed on the dorsal surface of the body was intense and accompanied by many vibices. Although the jaw, neck, and upper limbs were limp, the lower limbs were still rigid. The rectal temperature was 18°C. It was estimated that the victim had been dead at least 30 h at the time of autopsy.

As shown in Fig. 1a and b, the penis of the body was neatly amputated at its base. It was apparently cut off with a sharp cutting weapon postmortally, because the cut surface of the penile stump showed little sign of intravital hemorrhage.

Apart from the wound in the private parts, there was a faint ligature mark around the neck of the body. The face was congested and cyanotic and a number of petechiae were present beneath the conjunctivae and oral mucosa as well as the serous membranes of internal organs. The brain was slightly congested and the heart contained a large amount of dark fluid blood. Both lungs were bulky and congested. The air passages were full of hemorrhagic froth. It was reasonably concluded that the victim was strangled to death with a soft cord-like weapon. Since there was no defence injuries on the body, it was assumed that the victim had been assaulted quite unexpectedly.

Intensive investigation into the case by police finally led to the arrest of a suspect. The suspect was a 42-year-old bar girl. She had long been very intimate with the victim. It was said that she had intended to marry him eventually. However, the victim refused her proposal. In a fit of pique, she strangled the victim with a tie and cut off his penis with a kitchen knife. The amputated penis was later found frozen in a home freezer in her apartment. This was brought up before us for identification, since the suspect stubbornly asserted, though contradictory, that there was no evidence to indicate that the penis had been derived from the victim.

As shown in Fig. 2a and b, the penis, measuring 8.3 cm in length and 30.6 g in weight, had the characteristic features of an adult male. The cut surface of the penis corresponded in detail to that of the penile stump of the victim, and it was noted that a trapezoid skin defect

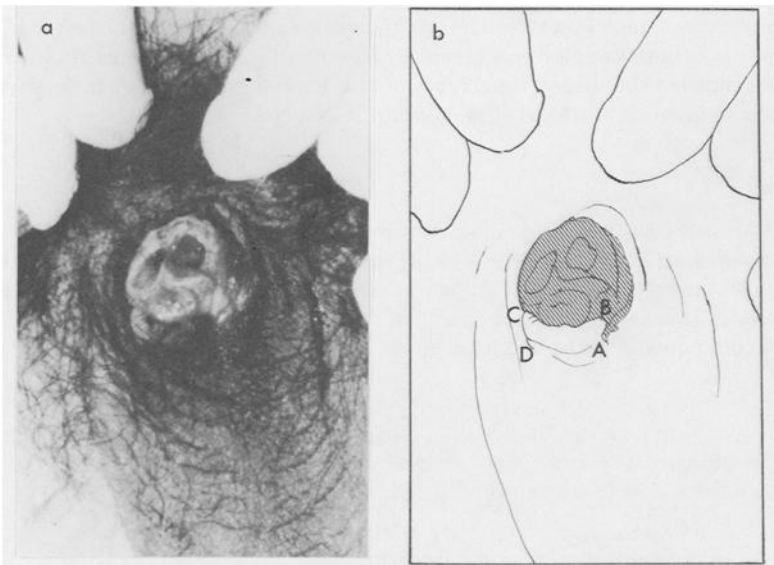


FIG. 1—The photograph (a) and the drawing (b) of stump of the amputated penis. Note the trapezoid skin flap (ABCD).

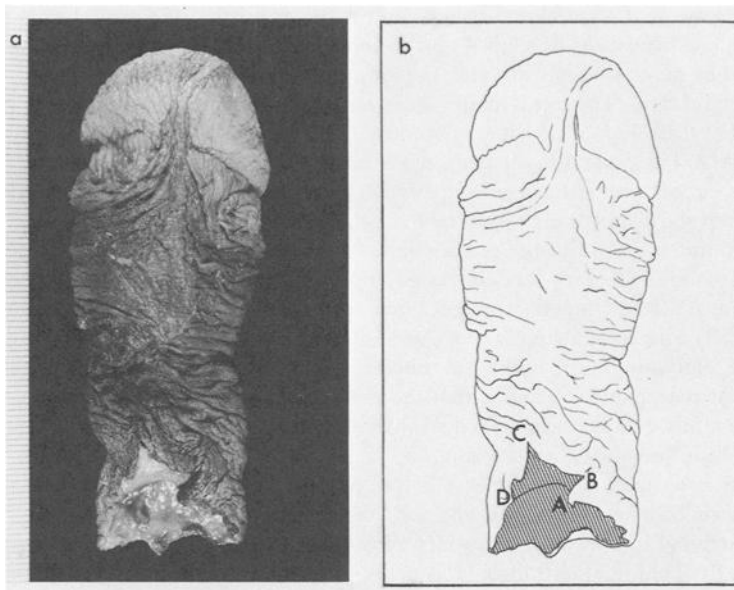


FIG. 2—The photograph (a) and the drawing (b) of ventral surface of the amputated penis. Note the trapezoid skin defect (ABCD).

at the wound margin of the penis was very similar in size and shape to a skin flap still adhering to the penile stump.

To substantiate the above findings, testing of the ABO type and the isozyme types of phosphoglucomutase<sub>1</sub> (PGM<sub>1</sub>), phosphogluconate dehydrogenase (PGD), and esterase D (EsD) was carried out as described earlier [3,4] on the penile skin sample and the heart blood sample of the victim obtained at autopsy. The interval between commitment of the crime and testing of the samples was five days. As shown in Table 1, the three isozyme types and the ABO type of both samples were identical. Based on these many pieces of evidence, the prosecutor indicted the suspect on charges of murder and mutilation of the cadaver. The trial is now in progress at a local criminal court in Nagoya.

### Comment

In the present case, the morphological investigations were conclusive for the personal identification of the amputated penis; the cut surface of the penis showed "jigsaw" fit to that of the penile stump of the victim. This may be due to the fact that the penis was preserved in a frozen state. These observations suggest that the penis was deeply cut at the first blow with a sharp knife, pulled slightly, and then cut off at the second blow.

TABLE 1—Four genetic markers determined in the skin of the penis.

Specimen	Genetic Markers Determined			
	PGM <sub>1</sub>	PGD	EsD	ABO
Skin of the penis	1	AC	2-1	A
Heart blood of the victim	1	AC	2-1	A

In addition to the morphological investigations, four genetic markers were determined to corroborate the identity of the penis (Table 1). The results clearly substantiate the morphological findings although 8.8% of the Japanese population has the particular combination of genetic markers in question. Other genetic markers that might give more definite evidence were not determined in the present case since the morphological investigations had already provided strong evidence for the identity of the tissue.

The use of genetic markers may be essential for the personal identification of tissues when other investigations are inconclusive.

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