## CASE REPORT

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# Suicide in a lions' den

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Abstract The case of a young man who committed suicide in a lions' den of a zoo is presented. Special attention is paid to the injury pattern which was characterised by numerous penetrating, stab-like wounds and lesions. The remarkable circumstances and history of this incident are most likely connected to a psychological or psychiatric disorder of the victim.

**Key words** Lion · Suicide · Zoo · Injury

### Introduction

Cases of extremely severe injuries to humans caused by carnivores [1] are not very common in Central Europe. They are predominantly caused by dogs, but rare incidents in connection with zoo [2] and circus [3] animals have been reported in the literature. These cases are usually witnessed accidents, suicides or attempted suicides. While such occurrences are usually easy to solve, unobserved incidents with the discovery of a corpse require detailed forensic examination as a homicide might be concealed. In this context, it is important to determine whether the injuries show signs of a vital reaction. Furthermore, it has to be proven whether the lesions can be attributed to the alleged animal and if there are any signs of other violent crime.

## Case report

An animal keeper at the Nuremberg Zoo discovered the corpse of a young man in the lions' den in the early morning. The body was dressed only in a T-shirt, the other pieces of clothing and shoes of the deceased were found neatly folded and stacked in the vicinity of the den.

In the grounds of the zoo, the police also discovered a briefcase which was proven to belong to the victim, which among other items contained a kind of diary, a handbook on satanism, photocopied parts of maps of several towns with zoos, a pornographic video-tape, numerous pornographic press cuttings showing similar-looking women with mane-like hair-styles, a few photographs of blonde male wrestlers, some of lions (some copulating or feeding on prey, others in menacing postures) and isolated illustrations of instruments of futuristic warfare.

Without exception the photocopies of the city maps showed the respective districts of several towns in which the zoological gardens are located. In hand-writing the victim had added partly detailed descriptions of the lions' dens, remarks on possible ways to get into the dens or even the cages themselves and comments such as "possible" and "not possible".

Further police investigations revealed that young man had been under psychiatric treatment for a number of years. As the parents of the young man did not release the treating psychiatrists from the medical oath, a detailed analysis of this aspect of the case was not

Major autopsy findings

Apart from many abrasions and haemorrhages, numerous superficial scratch-like lesions and several predominantly clean-edged gaping wounds of the skin and subcutaneous layers, without tissue bridging, were found all over the body (Fig. 1). While some of the these injuries showed varying degrees of haemorrhaging in the surrounding soft tissue, some appeared to be of postmortem origin as there was no sign of bleeding. This equally applied to the right leg and the genitals, where the soft tissue had almost entirely been chewed off. Unlike the irregular and ragged edges of these lesions mostly reaching down to the bones, the majority of the numerous wounds of the skin and subcutaneous layers resembled stab and cut-like wounds partly penetrating the thoracic and abdominal walls.

Upon inspection of the abdomen, major parts of the bowels and smaller parts of the gastric wall proved to be missing. The remaining parts of the stomach and bowels presented several lacerations with minor signs of haemorrhaging.

Considerable signs of haemorrhages were seen around lesions of the cervical subcutaneous soft tissue, the cervical muscles, the trachea and in the vicinity of fractures of the larynx and vertebrae C VII, TH I and TH II. Densely located petechial haemorrhages were detectable in the conjunctivae and the oral mucosa, the livores mortis proved to be barely visible and the inner organs were very pale, reflecting the marked exsanguination of the body.



Fig. 1 Numerous lacerations and abrasions on the neck of the victim

Results of toxicological analysis

The routine toxicological analyses of urine and venous blood samples did not detect ethanol or other substances with effects on the central nervous system and only slight traces of pentoxiphylline were found.

#### **Discussion**

The discovery of a human corpse in a lions' den is a very rare occurrence in Europe and has to be the subject of detailed forensic investigations. Although the circumstances of this incidence made it most likely that the victim had committed suicide, other possibilities such as a homicide or an accident nevertheless had to be excluded beyond reasonable doubt.

The above mentioned city maps, with ample handwritten comments, made it very clear that the victim had put a lot of thought and energy into finding a "suitable" zoo for the plan, making a suicide most likely. It was furthermore probably not a coincidence that he was found dead on the day after which the lions are not normally fed in the Nuremberg Zoo. Similarly, the incident had taken place overnight, therefore making it impossible for other zoo visitors to potentially hinder him from getting into the lions' den. These assumptions are almost proven by the diary-like record in which the man wrote that he would "cross a bridge" and find "final security" in the "rest" from which he could "not be recreated". In knowledge of these pieces of information and in the general context there is no reasonable doubt that he undressed voluntarily. In connection with the items found in his briefcase and the little known of his life, it is probable that he must have suffered from a psychological or psychiatric disorder with an unusual manifestation.

On these grounds the forensic autopsy was carried out to determine the cause of death and to rule out a homicide beyond reasonable doubt. Most of the externally visible wounds partially resembling stab and cut-like wounds were, in comparison with reports in the literature [4], ascribable to lions' claws and teeth. The haemorrhages in the surrounding soft tissue of most of these lesions, as well as the extensive bleeding in the vicinity of the fractured larynx and vertebral column, indicated that the injuries were induced antemortem.

The explanation for the signs of congestion in the conjunctivae and the oral mucosa are a powerful seizure of the neck with the lions' jaws and probably an additional thoracic compression due to the weight of the animals. The fractures of the vertebral column are to be interpreted as a result of severe shaking of the body after seizing it by the neck which is typical for large predacious cats when killing their prey [5, 6].

The substantial loss of blood, reflected by the pale livores mortis and colour of the remaining internal organs, was ultimately considered to be the cause of death. Apart from the numerous penetrating skin wounds another source of haemorrhage was the abdominal cavity, out of which the lions had torn parts of the stomach and major parts of the bowel. The rather minor degree of local haemorrhaging in comparison with the severe abdominal injuries make it most likely that the blood circulation was considerably reduced at the time when the lions started feeding on the parts of the intestines. As the amputated genitals and the skeletonized right leg showed no signs of haemorrhage, the conclusion has to be drawn that these injuries were induced after death at a later phase of the incident.

Bearing the case history and the circumstances in mind, and in view of a lack of injuries that could not have been caused by entering the lions' den and by the lions themselves, there remains no reasonable doubt that the presented case has to be classified as a suicide.

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