

SUDDEN DEATH IN BENIN REPUBLIC RURAL AERA – ONE CASE OF AORTIC DISSECTION DISCOVER DURING AUTOPSY

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INTRODUCTION

The fact that a person who had a dispute with a relative dies suddenly is not sufficient to support the charge of homicide. Instead, it is a case of suspected death. A forensic autopsy is a powerful tool that helps to clarify these cases. However, it must be systematic in the event of a suspicion of homicide to assess the nature of the death and make the difference between a violent and natural death. Therefore, this case report aimed to describe a case of suspicious death caused by aortic dissection.

OBSERVATION

A Neighbor discovered the corps of Mister Felix in his backyard in January 2021. He lived in a village far from town. He had an abrasion on his chin. He was male and 48 years old. Those around him did not know of any history of high blood pressure, drug addiction, or chronic pain. He had argued with a rival in love a few days earlier in front of witnesses. His family has unblocked accused his rival of crime. There was no forensic lift. A forensic autopsy was ordered by the public prosecutor. On-body examination, he was dark-skinned with a thin build. He presented with cyanosis in the extremities (finger, toes). Apart from the abrasion on the chin, he did not show any recent violent lesions. The internal examination revealed a hemopericardium with coagulated blood (580 g), an intra-pericardial rupture of the ascending branch of the aortic arch. The lesion extended over 1.2 cm. It was associated with a dissection of the aorta. It involved the ascending branch and the horizontal branch of the aortic arch. The large arteries showed atheromatous plaques. The heart weighed 640 gr. The heart chambers were dilated. The inner wall of the aorta was also the site of many atheromatous plaques. Toxicological examinations did not reveal



DISCUSSION

Aortic dissection has been reported to be the second most frequent cause of sudden cardiovascular death (most common is ischemic heart disease) as investigated by medical examiners. In west Africa Aortic dissection is a rare condition. It has a prevalence of 5 to 30 cases per million population. It is usually mildly symptomatic, and its discovery is either accidental through a cardiovascular workup. In sub-Saharan Africa and mainly in rural areas, its discovery is mainly post-mortem, thanks to forensic autopsy. It mainly concerns male subjects. Aortic dissection rupture usually occurs after age 60. the death of our subject, therefore, occurred much earlier than usual. He presented with a Type A dissection according to the Stanford classification. The site of rupture is consistent with what is commonly seen in type A aneurysms. In this form, the rupture results in hemopericardium with cardiac tamponade. This is what explains death. Aortic dissection is more often the consequence of severe hypertension poorly managed than of congenital origin. The presence of atheromatous plaque and the cardiomegaly suggested that the subject had high blood pressure. However, the deceased surely did not know that he had cardio-vascular pathology. In our context, the prognosis of aortic dissection is terrible, mainly when access to adequate healthcare is complex.

CONCLUSION

This case confirms the interest for both public health and justice in having autopsies performed in the event of a suspicious death. In addition, it would have been interesting to have the results of the anatomopathological examination to be able to discuss the aetiology of this aortic dissection.

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