Anatomical bases of a case of retroperitoneal haemorrhage

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Forensic Clinical Anatomy includes the evaluation of the normal anatomical basis of pathological findings in forensic context; this is frequently pivotal to verify the anatomical plausibility of alleged iatrogenic injuries. The case is here reported of a 20-year-old woman who died for sudden haemorrhagic shock, due to retroperitoneal haemorrhage of unknown origin. About three months before she had undergone surgical decompressive fasciotomy for traumatic haemorrhage at the level of the right calf. About one months before death, another trauma had also occurred with hematoma of the posterior aspect of the right thigh. Four days before death, she had also undergone angiographic TC which showed arterio-venous malformation of the homolateral calf. Autopsy examination performed by another medico-legal consultant reported triple laceration of the right superficial femoral artery. The anatomical bases and plausibility of the various hypothetical anatomo-physio-pathological pathways (iatrogenic lesion of the superficial femoral artery during angio-TC? Delayed post-traumatic hematomata of the thigh or ileo-psoas? Spontaneous retroperitoneal haemorrhage? Artefactual autopsy lesions of the superficial femoral artery?) are discussed.

Keywords
Forensic clinical anatomy; vascular system.