

Post mortem computed tomography and magnetic resonance imaging of single organs

Veronica Macchi¹ - Andrea Porzionato¹ - Aldo Morra² - Cinzia Tortorella¹ - Raffaele De Caro¹

¹ Istituto di Anatomia, Università degli Studi di Padova, Padova, Italia - ² Servizio di Radiologia, Eugenea Medica, Padova, Italia

Computed tomography (CT) and magnetic resonance (MR) have been increasingly used in routine forensic practice and research, and, recently, also in cases of natural deaths. Post mortem CT and MR of single organs is currently applied only for investigation of cardiovascular pathologies. The aim of the present study was to show our experience of radiological analysis of single organs, as an integrative tool for research and forensic applications. The anatomo-radiologic study for forensic purpose was performed on single organs sampled at autopsy and on historical specimens. The specimen underwent CT and MR examinations. Basing on our experience, post-mortem CT and MR on single organ are very useful tool in detection of anatomical variations; diagnosis of cardiovascular pathologies in combination with macroscopic examination and histological evaluation; evaluation of findings shown at post-mortem CT examination of the body and not confirmed by macroscopic examination; analysis of historical anatomical specimens.