

TWGPAM – Symposium May 8th 2024, 11:00 – 12:30

Organization and Chair: Silke Grabherr

11:00	Introduction into Post-mortem Angiography 15 min + 5 min discussion	Silke GRABHERR	
11:20	Interests of the MPMCTA in blunt-force trauma 15 min + 5 min discussion	Fabrice DEDOUIT	
11:40	Postmortem imaging and anatomy teaching at the University of Lausanne. State of the art and perspectives 15 min + 5 min discussion	Sami SCHRANZ	
12:00	Presentation of Fumedica and its postmortem division 15 min + 5 min discussion	Alejandro	DOMINGUEZ
12:20	Conclusion and final discussion <i>10 min</i>	All	

Summary:

Post-Mortem Angiography (MPA) allows the visualization of the vascular system of a deceased. Its use in forensic medicine is increasing and nowadays it is a highly appreciated complement to classic autopsy. This symposium will give a short overview of different techniques that can be applied and will present the actual composition and activities of the "Technical Working Group for Postmortem Angiography Methods" (TWGPAM).

Two talks are dedicated to special thematic: the use of MPMCA for investigating blunt-force trauma and the application of modern imaging and angiography in anatomy teaching.

In legal medicine, cases of blunt force trauma are most common cases of traumatic death. Blunt-force injuries are produced when the body is struck with or strikes a blunt object. The authors of this talk will present the different possibilities permitted by Multiphase Post-Mortem Multiphase CT Angiography (MPMCTA) in blunt trauma cases. The panel of lesions and their aspects is large, from abrasions to fractures affecting potentially all the anatomical areas of the human body. The presentation is divided into different parts corresponding to different anatomical parts potentially affected by blunt trauma: skin, head, chest, abdomen and pelvis, and extremities. Many illustrative examples will be presented including visceral and vascular lesions. Some points concerning particularities of falls from a great height and motor vehicle accidents are also included within the presentation.

Besides the application in forensic medicine, modern imaging techniques have also pioneered anatomy teaching. At the University of Lausanne, integrating CT-scan imaging for bodies donated to science has demonstrated its interest for 3 years now. Thanks to these images it is



possible to make the best use of each body according to its particularities. The obtained CT images are integrated into the dissection work of medical students during their anatomy courses. This gives the students the chance to compare the real morphology of the human body to the one that can be observed on radiological images.

Postmortem imaging also finds its place in postgraduate training where images are used to get as close as possible to clinical reality. For example, such an approach is used for neurosurgeons who can explore and train new surgical interventions on specially prepared cadaver models by using imaging support for neuronavigation.

To perform PMA in the daily routine of legal medicine, standardized procedures are important. But also to use of high-quality material plays an important role. Therefore, special devices have been developed by the industry with the aim to facilitate the introduction of this technique into the daily use. Fumedica is a Swiss Company who as investigated in the development of technical equipment for PMA. It is the only industrial member of the TWGPAM. In the last presentation of this symposium, the efforts of this company will be demonstrated, and its postmortem division can be discovered.

This Symposium will be closed by a short discussion between the different speakers and the audience.