An Introduction to Thiel Embalmed Cadaveric Dissections and the Gross Anatomy of the Anterolateral Abdominal Wall

Embalmcd cadavers have long contributed to the study of gross anatomy as silent mentors. While most educational institutes use a traditional formaldehyde-based method of embalming, some have introduced Thiel embalming instead. Thiel embalming allows for the preservation of cadavers while maintaining an almost life-like mobility and retention of natural colours. This method of embalming further facilitates dissections by allowing for improved surgical training and aiding applied and functional anatomy research as well as teaching.

The anterolateral abdominal wall begins superiorly at the xiphoid process of the sternum to the pubic bones inferiorly. In order to locate the abdominal viscera housed in this region, the anterolateral wall is divided into four quadrants and subsequently nine additional regions. This method of classification is necessary in accurately and efficiently reaching the peritoneal cavity during surgical intervention. The anterolateral abdominal wall is composed of the following layers: skin, superficial and deep fascia, layers of muscle, peritoneum, nerves, blood vessels and lymphatics. The muscles present in the anterolateral abdominal wall maintain its structural integrity and allow for a high range of movement such as lateral flexion, extension and rotation. They further maintain its integrity by containing increased amounts of pressure during defecation, urination and coughing.

This seminar aims to further discuss performing as well as teaching human cadaveric dissections on Thiel embalmed cadavers. Moreover, this demonstration will discuss the layers of the anterolateral abdominal wall in further detail before concluding by applying the clinical relevance of understanding the gross anatomy in this region.

ABOUT THE SPEAKER

Sara Kashkouli is a graduate anatomist from the University of Dundee. She has spent the past year at the Centre for Anatomy and Human Identification performing cadaveric dissections and investigating structural anatomical variations. She teaches gross anatomy to dental and medical students and hopes to continue finding innovative ways to teach.