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Morphometric study of the gracilis muscle and its pedicles

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Abstract: The purpose of this study was to determine the length of the gracilis muscle belly, its width, observe for anatomical variants of the muscle and to study the topography of its neurovascular pedicles. The study included 44 formalin fixed human cadaveric lower limbs. The length of the gracilis muscle belly and its width were measured at the origin, at the center and at the end of the muscle. The neurovascular pedicles of the gracilis muscle were identified and counted and the topographical distance of the neurovascular pedicles from the origin of the gracilis muscle was determined. The mean length of the gracilis muscle belly was mm. and the width were---. The neurovascular pedicles, of the gracilis muscle were ranging between 1 and 3. The distance of the entrance of neurovascular pedicle to the gracilis muscle from its origin was ranging between ----to --- mm. It was observed that the neurovascular pedicles were highest (%) at the range of mm away from the---. The anatomical variants observed were two heads of origin one from pubic tubercle and other adductor longus, extra belly splitting 180 mm away from orign and the extra belly length was 191 mm, two insertions one at the tibia and other fascia of sartorius. This study will help the surgeon in assessing the length and width of muscle that is available and the possible anatomical variants that could be present before starting the reconstructive surgery and the knowledge of the topography of the pedicles would help minimize the risk of iatrogenic damage while performing the surgery.

Key words: gracilis, neurovascular pedicle, topography