Surgical reconsiderations in regard to the anatomy of the renal fascia and the retroperitoneal space around the kidney

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PURPOSE The constitutions of renal fascia and the retroperitoneal space around the kidney were examined.

METHODS An open radical nephrectomy was performed in the lateral position using a transcostal approach. Through the demonstration of perioperative views, we examined the above aim.

RESULTS The surface of the removed kidney looked like it was covered by a smooth membrane, which would be the so-called renal fascia. However, such a smooth membrane could not be observed at the dissection site around the kidney. Only a foam-like, loose connective tissue was observed. On the other hand, using an operative procedure such as dissection or pulling tissue in another direction, a foam-like, loose connective tissue can look like a membrane. In addition, the perirenal space is not a simple fat-filled chamber but contains some connective tissue fibers.

CONCLUSIONS Renal fascia would not be a definite membranous structure. The retroperitoneal area around the kidney would be filled with connective tissue fibers, including some fat, which would be complicated for three dimensions. As a result of operative procedures, such connective tissue including some fat would be groped, which would be recognized as renal fascia.

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