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

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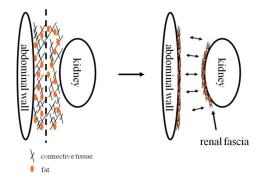
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PURPOSE The constitutions of renal fascia and the retroperitoneal space around the kidney were examined.

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.



Our observations are summarized. The retroperitoneal area around the kidney may be filled with a connective tissue including some fat, which would be complicated for three dimensions. If we perform an operative procedure on this tissue, such as dissection or pulling the tissue to some direction, the group of connective tissue with or without fat can be pulled by neighboring fixed structures and thicken, which would be recognized to be a membrane or fascia.

Presented at the 3rd International Fascia Research Congress April 2012 Vancouver, BC, Canada

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