47th ANNUAL INTERNATIONAL CONGRESS EHS 2025 JUNE 4-6 PARIS-FRANCE

Inguinal Hernia

Laparoscopic finding of Obturator Hernia

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Introduction

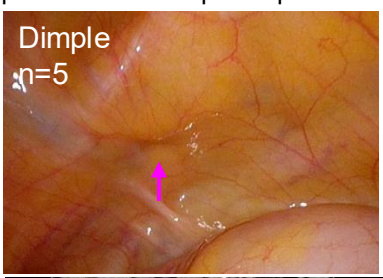
In spite of widespread use of CT scans, diagnosis of obturator hernias without strangulation still remains difficult. Therefore, morphologic finding of obturator hernia without strangulation is unknown. The aim of this study is to summarize laparoscopic finding of obturator hernia.

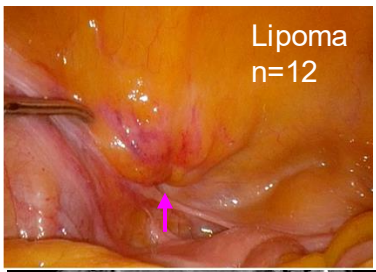
Object of this study

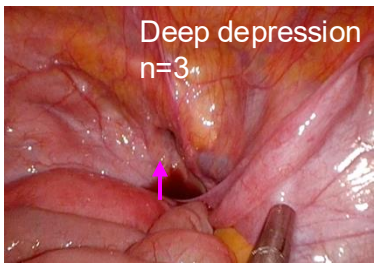
From 2020 to 2024 we have experienced 16 cases and 23 lesions of radiographically confirmed obturator hernia who received laparoscopic observation of the lesion and hernia repair. Among them 14 cases were diagnose by herniography to diagnose various groin complaint. The other 2 cases demonstrated intestinal strangulation and diagnosed by CT scan.

Herniography and HGCT

Herniography was performed based on the report by Gullmo et al., with observation and imaging conducted in the prone semi-upright position after injecting contrast medium into the peritoneal cavity. When herniography suggested an obturator hernia, abdominal CT examination was performed in the prone position one hour after the examination to secure diagnosis. (HGCT)







Laparsopic finding of obturator hernia and corresponding HGCT

By laparoscopy, obturator hernias were classified into the following 3 types: in 5 lesions dimple type with a slight depression, in 12 lesions lipoma type with formation of a lipoma and partial invagination of the peritoneum, and a distinct deep depression in 5 lesions. In 2 lesions there were no specific finding due to invagination of bladder into obturator canal. Under pneumoperitoneum (10mmHg) dimple type demonstrated just shallow depression. In the meantime, other two types (lipoma depression) demonstrated peritoneal invagination into obturator canal.

Discussion

Based on the laparoscopic findings, it was considered that in the dimple type, peritoneal invagination occurs only during straining, in the lipoma type, the lipoma along with the peritoneum demonstrate invagination during straining and reduction during relaxation, and in the depressed type, peritoneal invagination occurs constantly. The accumulation of preperitoneal fat and invagination of the preperitoneal fat and peritoneum into the obturator canal is typical presentation during progression from dimple to deep depression.

The protrusion status, and the morphology of the hernia change according to abdominal pressure.