

## Use of preoperative progressive pneumoperitoneum in inguinal hernia with "loss of domain".

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### AIM

Hernias with loss of domain are defined as a hernia where the contents of the hernial sac exceed the capacity (volume) of the abdominal cavity, which makes spontaneous or manual reduction of the viscera impossible. The preoperative progressive pneumoperitoneum is a technique that has been used to expand the abdominal cavity volume, for presurgical preparation of patients with large hernias.

### METHODS

An 84-year-old male patient with no previous chronic degenerative or surgical history. His current condition began more than 40 years ago with an increase in volume in the left inguinal region, which was protocolized by the outpatient clinic. An abdominal tomography was requested, observing a hernia defect measuring 15 x 9.1 cm. A hernia with loss of domain is confirmed by a Tanaka index >25%. Prior to his surgical intervention, periodic sessions were performed using progressive pneumoperitoneum (1000 cm<sup>3</sup> for 21 days).

### RESULTS

A left inguinal repair was performed. Findings: 15 cm hernial defect, 38 cm hernial sac containing intestinal loops, omentum and bladder. Polypropylene mesh was placed with the Lichstenstein technique. The patient was discharged after 48 hours with adequate progress.



### CONCLUSIONS

The objectives to be achieved with the use of preoperative progressive pneumoperitoneum are: Gradually raise intra-abdominal pressure again, stabilize the shape and function of the diaphragm, with improvement in ventilatory function, lengthen the muscles of the abdominal wall and, therefore, production of pneumatic lysis of loose adhesions, mesenteric and intestinal circulation once the viscera gradually return to the cavity.

### REFERENCES



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