

Decompression of a pneumoperitoneum during an extraperitoneal inguinal hernia repair (TEP) by incision of the umbilical sac under direct vision

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Background

Peritoneal tears are a recognised complication of extraperitoneal inguinal hernia repair (TEP) [1] and can necessitate conversion to transabdominal pre-peritoneal (TAPP) repair due to loss of the extraperitoneal space. To avoid this conversion, which carries with it risks of further complications [2], it is possible to decompress the pneumoperitoneum and complete the TEP repair. This decompression can be performed with a Verres needle at Palmer's point; however, this decompression is slow, rarely provides a complete decompression and carries the risk of further complications [3].

Technique

When performing a TEP repair of an inguinal hernia using a direct trocar insertion technique below the umbilicus, in the event of creating a pneumoperitoneum due to a peritoneal tear it is possible to incise the umbilical sac under direct vision and thus decompress the pneumoperitoneum and continue with the procedure. This defect can then be closed with a suture at the end of the procedure.

Discussion

The possibility of decompressing the pneumoperitoneum with this technique was made apparent at the time of performing a TEP repair of an inguinal hernia on a patient who had a concurrent umbilical hernia. However, the presence of such a hernia is not a pre-requisite for this method of decompression. The TEP was completed without the need to convert to TAPP. This method can be performed safely whenever a TEP is complicated by a pneumoperitoneum.

References

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