

Considerations on Gastroschisis Repair

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Abstract

Background: Although primary closure of the gastroschisis is possible in many cases, there have been various strategies published and materials used to cover the eviscerated bowel when the abdominal wall defect cannot be closed in one step, providing bowel protection and reduction of heat and fluid loss. There have been suggestions of coverage materials such as skin graft, lyophilized dura mater graft, free flap corium and meshed skin graft (1,2).

Purpose: We highlight an alternative repair method of gastroschisis in those cases where there is a disproportion between the amount of eviscerated organs and the hypoplastic abdominal cavity. If in this case primary closure of the abdominal wall is chosen, the difference in volume can cause a significant increase in intraabdominal pressure.

Method: In some cases, when complete primary closure was not possible, we used an alternative method to repair the parietal defect using umbilical cord patch.

Results: This technique creates a mesothelial surface in contact with the bowel. Remote tracking of these patients showed excellent results.

Conclusions: This technique is easy to apply and very useful for infants with gastroschisis especially when primary closure is not possible. The use of autologous material, in this case as the umbilical cord, has several advantages, including wide availability, a lower rate of infection and significantly reduced costs.

Key words: gastroschisis, surgical treatment, umbilical cord patch

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