

## “SAFETY BELT SYNDROM” ABDOMINAL WALL RECONSTRUCTION WITH THE FIRST SYNTHETIC RESORBABLE MESH (TIGR® Matrix)

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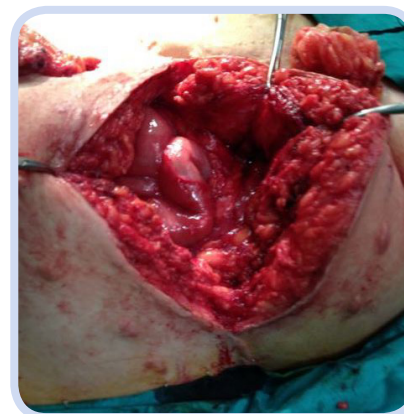
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### INTRODUCTION

Traffic accidents are the main death cause in children between 2 and 14 years old. Safety devices reduce morbidity/mortality but in some occasions they can cause severe injuries described as the “safety belt syndrome”: vertebral and marrow injuries, abdominal viscera, muscle-skeletal and cutaneous injuries.

### CLINICAL CASE

Patient, 13 years old, 70 kg, with polytraumatism from traffic accident (as passenger) she did not faint. Globular abdomen, painful when touched, peritoneal irritation signs and abrasion caused by the abdominal band of the safety belt on both sides. No motoric or sensorial deficiency. A TAC scan is performed and the results are fracture-dislocation of L2 and big pressure at the end part of the vertebral column. A trans-internal defect of the abdominal wall with a big eventration in intestinal loop in mesogastrum is also detected. The colon is perforated, kidney laceration on the left side and splenic laceration.



A semi-urgent laparotomy is performed noticing a mesenterium haematoma with sprain of ileal loop and fecaloid peritonitis. After peritoneal cleaning a left colostomy is performed as well as resection and ileo-ileal anastomosis with abdominal wall reconstruction with polyglycolic acid mesh.

The evolution is satisfactory with a post-surgery evaluation made on the sixth day as well as reduction and posterior arthrodesis from T12 to L4. 10 months after the accident a closed colostomy is performed with a left abdominal reconstruction using a long-term resorbable synthetic mesh, 10x15 cm (TIGR® Matrix), sutured over the fascia. Satisfactory evolution without complications.

### CONCLUSIONS

Incorrect safety belt use may cause serious injuries in a traffic polytraumatized patient. Findings of skin damages by a safety belt must raise suspicion of abdominal injuries to avoid therapeutic delays and thereby morbidity/mortality increase.

The use of long term resorbable synthetic meshes (TIGR® Matrix) is a huge advance in the reconstruction of abdominal wall defects in polytraumatized patients.



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