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The Management of the Open Abdomen - A Literature Review

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Abstract

An essential component of the concept of "Damage control surgery", laparostomy is the procedure by which the abdomen is deliberately abandoned open, the visceroperitoneal contents being temporarily protected by multiple technical means. Actual classification: Grade 1, without viscero-parietal adhesions or fixity of the abdominal wall (lateralization), divided into: 1A clean, 1B contaminated and 1C enteral fistula -cutaneous skin is considered clean); Grade 2, which develops fixation is subdivided into: 2A clean, 2B contaminated and 2C enteral fistula; Grade 3, "frozen abdomen", is divided into: 3A clean and 3B contaminated; Grade 4, defined as entero-atmospheric fistula, is a permanent fistula associated with the presence of granulation tissue and a frozen abdomen. Indications of the open abdomen are: damage control surgery, abdominal compartment syndrome, peritonitis, severe acute pancreatitis, vascular emergencies. Temporary abdominal closure may be achieved by following methods: skin only closure, "Bogota bag", opsite Sandwich technique, absorbable mesh, non-absorbable mesh or commercial zipper, vaccum asisted closure, each with its own advantages and disadvantages. Regarding the definitive closure this can be achieved by non mesh and mesh mediated techniques. Component separation technique anterior and posterior should be considered the elective repair procedure in parietal defects after laparostomy. Although several studies have been published, there is still no consensus in the literature on the positioning of prosthetic material in relation to parietal planes. Some authors suggest better results (relative to the rate of recurrence and complications) for implantation in the "sublay" position. Open abdomen is an important tool in the arsenal of the emergency surgery. Classification, indications, methods of temporary abdominal closure are evolving, as well as management of enterocutaneous fistulas and fascial closure, therefore
permanent update is neccessary to offer patients the best care.

Key words: open abdomen, laparostomy, vacuum asisted closure, enterocutaneous fistula, temporary abdominal closure