

Recent Trends in Reconstruction of Anterior Abdominal Wall Defects

Essay

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List of abbreviations:

ALT	Anterolateral thigh flap
AW-VCA	Abdominal Wall Vascularized Composite Allotransplant
ASIS	Anterior superior iliac spine
CST	Component Separation Technique
CT	Computed Tomography
MICST	Minimally invasive component separation technique
MRI	Magnetic resonance imaging
PTFE	Poly Tetra Fluro Ethylene
SSIs	Surgical site infections
SSO	Surgical site occurrence
TE	Tissue Expansion
TFL	Tensor Fascia Latae
TLAWR	Totally laparoscopic abdominal wall reconstruction
US	Ultrasonography
VAC	Vacuum Assisted Closure
VCA	Vascularized Composite Allotransplant

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INTRODUCTION

Abdominal wall defects can result from trauma, excision of abdominal wall tumors, necrotizing infections to abdominal wall components, or complications of previous surgeries to the abdomen. The abdominal wall provides protection and serves as a container for the abdominal viscera, in addition to several other functions, most importantly: maintaining the upright posture, supporting the trunk, and assisting in generation of Valsalva maneuver that helps in coughing, urination and defecation. Apart from cosmetic point of view, reconstruction of these defects is to minimize their strong functional impact on the patients' quality of life. **(Hutan et al., 2014).**

A defect in the abdominal wall exists when one or more components are missing. The fascia and muscles are the most important parts of the abdominal wall as they provide support and function, while the skin provides protection to the inner layers. **(Leppäniemi and Tukiainen, 2013).**

There are different causes of abdominal wall defects either congenital or acquired. **(Loadsman, 2004).**

The congenital causes can be divided into either herniation of abdominal contents at the umbilicus as