P011 THE EARLY OUTCOMES OF ABDOMINAL WALL RECONSTRUCTION WITH POLYVINYLIDENE (PVDF) MESH IN THE INFECTED SETTING: A CASE-CONTROL SERIES

Claudio Birolini1, Eduardo Tanaka2, Jocielle Miranda2, Abel Murakami2, Edivaldo Utiyama2

1Hospital Das Clínicas, Universidade de São Paulo, General Surgery and Trauma, São Paulo, Brazil, 2Hospital Das Clínicas, Universidade de São Paulo, General Surgery and Trauma, São Paulo, Brazil

Aim: The use of synthetic mesh to repair infected defects of the abdominal wall remains controversial. PVDF mesh was introduced in 2002 as an alternative to polypropylene, with the advantages of improved biostability, lowered bending stiffness, and minimum tissue response. This study aimed to evaluate the short-term outcomes of using...
PVDF mesh to treat infected abdominal wall defects in the elective setting.

**Material and Methods:** A prospective clinical trial started in 2016 and designed to evaluate the short and mid-term outcomes of 38 patients submitted to abdominal wall reconstruction in the setting of active mesh infection and/or enteric fistulas (AI) when compared to a group of 38 patients submitted to clean ventral hernia repairs (CC). Patients were submitted to single-staged repairs, using onlay PVDF mesh reinforcement to treat their defects.

**Results:** Groups had comparable demographic characteristics. The AI group had more previous abdominal operations and a longer operative and anesthesia time. At 30-days, surgical site occurrences were observed in 18 (47.4%) AI vs. 17 (44.7%) CC; surgical site infection occurred in 4 (10.4%) AI vs. 6 (15.8%) CC, and a higher number of procedural interventions were required in the CC group, 15.8% AI vs. 28.9% CC. At 6-months follow-up, no chronic infections or hernia recurrences were observed in both groups.

**Conclusions:** The use of PVDF mesh in the infected setting presented very favorable results with a low incidence of wound infection.