Aim: Our study aims to analyze and evaluate the results obtained in patients older than 80 years old who underwent complex abdominal wall reconstruction (CAWR) in a multicenter abdominal wall unit using different surgical approaches.

Material and Methods: Patients were identified from a prospective maintained multicenter database. Demographic characteristics, incisional hernias (IH) characteristics, as well as postoperative outcomes, including short and long-term complications have been analyzed.

Results: 21 patients were identified. The mean age was 82.5 (+/- 2.4) years old. There were 10 (47.6%) midline IH, 5 (23.8%) lateral IH, 4 (19%) synchronous midline and lateral IHs, and 2 (9.6%) parastomal hernias (PH). 9 (42.8%) Madrid TAR modification technique, 5 (23.8%) Rives-Stoppa, 3 (14.3%) lateral preperitoneal approaches, 1 (4.8%) midline preperitoneal approach and 1 (4.8%) anterior component separation were performed. In patients with PH, a modification of the Pauli technique (4.8%), and a unilateral TAR with a keyhole repair associated (4.8%) were performed.

There were 7 (33.3) surgical site occurrences (SSO), 1 (4.8%) seroma, 3 (14.3%) hematomas and 3 (14.3%) surgical site infections. Only 3 (14.3%) SSO required procedural intervention. During a mean follow-up of 20.6 (+/- 15.9) months, 1 (4.8%) hernia recurrence was diagnosed. No cases of postoperative bulging were recorded. There were also no cases of chronic pain in the sample.

Conclusions: CAWR in the elderly patient, after an adequate preoperatively selection of patients, presented acceptable short- and long-term results, despite the advanced population age.