



AB236. 51. Physical function performance and recovery of patients undergoing abdominal surgery in relation to postoperative complications— a prospective real-world study

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Background: The primary aim of the study was to evaluate the physical function performance differences between those who develop complications and those who do not and determine their impact on recovery. Complications are associated with significant costs in terms of morbidity, finance, psychological and impact on recovery. Many risk factors have been identified relating to surgical complications, however no single measure has been identified to predict complications in an abdominal surgery population, particularly in relation to physical function.

Methods: Forty-nine participants were recruited via the pre-operative assessment unit in the University Hospital

Limerick. Data was collected relating to demographics, physical function, lung function, surgical parameters and recovery.

Results: Complication rate was 41.9% (n=18) pre-discharge, 30.2% (n=13) at 30 days and 21% (n=9) at 60 days. Obesity (P=0.005), longer operating time (P=0.05), >2 co-morbidities (P=0.033), low activity levels (P=0.020), low VO₂peak (P=0.017) and lower 6-minute walk distance (P=0.019) were statistically different between groups. Complication led to increased length of stay from 8.5 to 2 nights (P<0.001). Activity levels reduced regardless of complications and did not return to baseline levels by 60-day post-surgery (P<0.001). Complications increased sedentary time from a median of 5 to 7.5 hours daily (P=0.007). Groups reported almost 100% physical recovery at 60 days without complications and 75% with.

Conclusions: These results show significant potentially modifiable differences between people who develop postoperative complications and those who don't. Physical activity levels remain significantly reduced for all who undergo abdominal surgery at 60 days and may lead to future medical diseases and complications if not addressed.

Keywords: Physical function; abdominal surgery

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