

laparoscopic incisional hernia repair with 'Protack™ versus Reliatack™', IPOM and sutured fascial closure

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Aims: Provide a report on all patients who underwent laparoscopic incisional hernia repair as part of the TACKoMesh RCT prior to unblinding of treatment arms.

Methods: Trial recruitment was for primary incisional hernia with a defect diameter of 3–10cm. 63 patients (target 74–136) were operated on prior to the outbreak of COVID-19. Post-operative pain is the primary trial outcome.

Surgery was performed with spiral-tack mesh-fixation devices (Protack™ (permanent) or Reliatack™ (absorbable)), Symbotex™ IPOM mesh, and sutured fascial closure using extracorporeal knot ties.

Data was collected on trial forms and lifestyle questionnaires (SF-36 and CCS). All data were explored and described in RStudio v1.4.1106.

Results: Patients were aged 36–80 and 57.1% male. Mean preoperative BMI was 30.91.

Mean operating time was 81minutes. In 20.6% patients multiple hernia defects were identified. A good degree of fascial closure was achieved in all patients using a median 3 knots.

Median mesh-fixation time was 286seconds and a mean of 25 tacks/patient were used. Median length of hospital stay was 3.5days.

Patients were asked "Please indicate on this scale [VAS 0–10] the pain that you currently experience from your incisional hernia during activity?". Median responses for Day0/pre-op, Day1, Day6, Day30 and Day365 were 4.5, 8.0, 6.0, 3.0 and 1.5 respectively.

At one year, 11% patients had experienced hernia recurrence and 52% a post-operative seroma.

Conclusions: Target recruitment was not possible owing to COVID-19. This technique has comparable recurrence rates. Reported pain increases post-operatively but is reduced at post-operative day30 and day365.