

**Abdominal wall repair with Fasciotens Hernia:
 first 16 consecutive cases in our referral center**
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Aim

We reported our experience of 13 consecutive cases for abdominal wall reconstruction by the use of The Fasciotens® Hernia device

Material & Methods

Fasciotens® Hernia device is used to stretch the fascia in a measurably controlled manner to achieve tension-free abdominal closure. Every patient made a TC scan preoperatively. The main principle of the device is the application of dynamic vertical traction along both fascial margins over a clamping system. The applied traction force is adjustable along a range of 0-100 N (Newton) as presented on the varying coloured fields of the longitudinal beam

Results

We performed this technique on 16 patients: 9 Males, 7 Females. Mean age was 62 years and mean ASA 2,7. Abdominal defects were all evaluated with a TC scan and re-measured intraoperatively. Mean traction was 30,3 minutes with a mean force of 17.8 kgs. We registered a mean reduction of defect's width from 14.8 to 8.8 cm. A Rives reconstruction was performed in 8 cases; in 5 patients was performed a TAR (in 3 even a Posterior Component Separation) and in two cases we performed a bridge technique. Mean operative time was 257 minutes. In 4 patients we treated conservatively a postoperative seroma; in another case was necessary an us guided aspiration of seroma. A patient died for complication related to the simultaneous pancreatic surgery performed. Follow up was at 3, 6, 9, 12 months. We registered only 2 partial recurrences.

Conclusions

Abdominal wall reconstruction with Fasciotens device is a safe procedure that can permit primary reconstruction in large defects.

| | SEX | ASA | AGE | OT MIN S | DEFECT BEFORE WIDTH | DEFECT AFTER WIDTH | TRACTION DURATION MINUTES | TRACTION FORCE KG | RECONSTRUCTION | MESH | C.-D. |
|----|-----|-----|-----|----------|---------------------|--------------------|---------------------------|-------------------|------------------|--------------|-------|
| 1 | M | 3 | 73 | 190 | 12 cm | 5 cm | 30 | 16 | Rives | DynaMesh | II |
| 2 | F | 2 | 51 | 265 | 13 cm | 7 cm | 25 | 18 | TAR | Ventra light | II |
| 3 | M | 3 | 67 | 300 | 16 cm | 8 cm | 40 | 18 | Rives | Ventra light | 0 |
| 4 | F | 2 | 56 | 170 | 18 cm | 12 cm | 25 | 18 | TAR | Ventra light | II |
| 5 | M | 3 | 51 | 205 | 18 cm | 12 cm | 45 | 16 | Posterior Bridge | Permacol | 0 |
| 6 | F | 3 | 73 | 180 | 18 cm | 10 cm | 30 | 18 | Posterior Bridge | Ventra light | V |
| 7 | M | 2 | 54 | 240 | 12 cm | 6 cm | 25 | 18 | Rives | DynaMesh | 0 |
| 8 | M | 2 | 57 | 255 | 17 cm | 11 cm | 30 | 18 | Rives | Ventra light | II |
| 9 | M | 3 | 69 | 220 | 16 cm | 9 cm | 30 | 18 | Rives | Ventra light | 0 |
| 10 | F | 3 | 71 | 240 | 13 cm | 8 cm | 30 | 18 | Rives | Ventra light | 0 |
| 11 | F | 3 | 46 | 195 | 10 cm | 6 cm | 30 | 18 | Rives | Polipro | IIIb |
| 12 | F | 3 | 88 | 150 | 10 cm | 5.5 cm | 30 | 18 | Rives | Ventra light | 0 |
| 13 | M | 3 | 57 | 450 | 19 cm | 13,5-11 cm | 30-20 | 18 | PRC+TAR | Ventra light | 0 |
| 14 | F | 3 | 60 | 480 | 17 cm | 11 cm | 30 | 19 | PRC+TAR | Ventra light | 0 |
| 15 | M | 2 | 48 | 240 | 17 cm | 7cm | 30 | 18 | Rives | Ventra light | 0 |
| 16 | M | 3 | 73 | 330 | 12 cm | 10 cm | 30 | 19 | PRC+TAR | Ventra light | 0 |
| | | 2,7 | 62 | 257 | 14,8 cm | 8,8 cm | 30,3 | 17,8 | | | |

