

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 ultrasound-guided aspiration of seroma. A patient died for a 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	Ventralight	II
3	M	3	67	300	16 cm	8 cm	40	18	Rives	Ventralight	0
4	F	2	56	170	18 cm	12 cm	25	18	TAR	Ventralight	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	Ventralight	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	Ventralight	II
9	M	3	69	220	16 cm	9 cm	30	18	Rives	Ventralight	0
10	F	3	71	240	13 cm	8 cm	30	18	Rives	Ventralight	0
11	F	3	46	195	10 cm	6 cm	30	18	Rives	Poliprop	IIIb
12	F	3	88	150	10 cm	5.5 cm	30	18	Rives	Ventralight	0
13	M	3	57	450	19 cm	13,5-11 cm	30-20	18	PRC+TAR	Ventralight	0
14	F	3	60	480	17 cm	11 cm	30	19	PRC+TAR	Ventralight	0
15	M	2	48	240	17 cm	7cm	30	18	Rives	Ventralight	0
16	M	3	73	330	12 cm	10 cm	30	19	PRC+TAR	Ventralight	0
		2,7	62	257	14,8 cm	8,8 cm	30,3	17,8			

