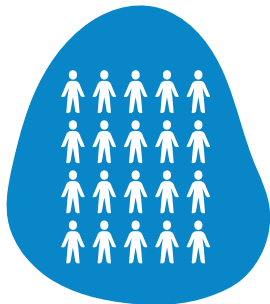


Vertical traction device (VTD) prevents abdominal wall retraction and facilitates early primary fascial closure (PFC) of septic and non-septic open abdomen (OA)

Conclusion

Vertical traction device (fasciotens®Abdomen) facilitates early primary fascial closure (PFC) in open abdomen (OA) after a mean period of 7 days. It is an effective tool for primary fascial closure with 100% closure rate and 0% mortality.

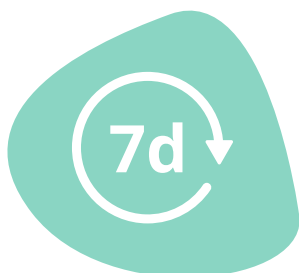


20 open abdomen

20 patients (12 septic/8 non-septic) in 6 hospitals. All patients were initially stabilized with laparostomy followed by either NPWT (12) or alternative TAC (temporary abdominal closure) system (8).

~ 7 days to PFC (primary fascial closure)

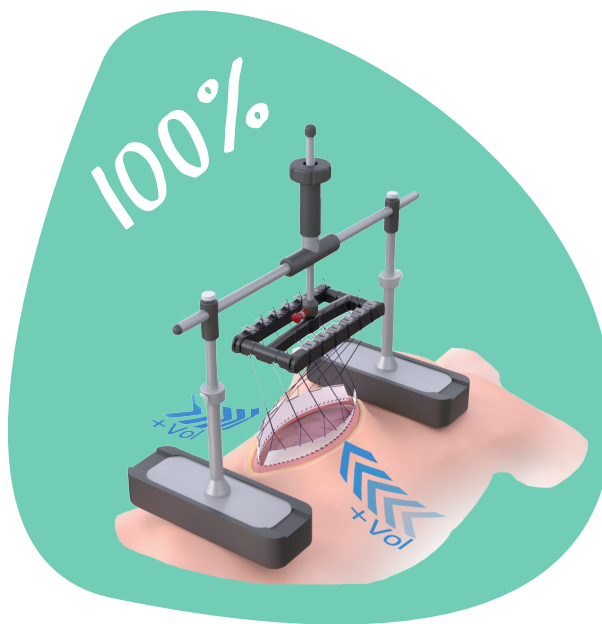
In all cases PFC was achieved after a **mean period of 7 days** within the NPWT and in non-septic OA subgroup and within **7.5 days** in the TAC (temporary abdominal closure) system and septic OA subgroup.



0% mortality

100% successful early closure

The 100% closure rate was higher compared to the closure rates reported in literature.



Low complication rates

4/20 patients developed a subcutaneous wound dehiscence 1 week after primary fascial closure (PFC), and 2/20 patients developed a fascial dehiscence leading to an incisional hernia 6 months after discharge. Our results revealed due to the high rate of PFC and the low rate of device related complications, that this device (fasciotens) appears to be an effective tool in the treatment of OA.



After 48h VTD - fascial distance significantly decreased

At relook laparotomy 48 h after VTD implementation, the mean fascia to fascia distance significantly decreased.

Hemodynamic and respiratory freedom

In all cases, early vertical dynamic traction exerted on the fascia by the device was possible without hemodynamic or respiratory function impairment.

