



Thiersch's operation for rectal prolapse management

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ABSTRACT

Thiersch's operation is a kind of suture technique to narrow the patulous anus for the treatment of rectal prolapse. It can be applied under local anaesthesia to elderly patients who can not tolerate major surgery. It also can be used as a temporary treatment until the definitive treatment is planned. We demonstrated a simple way of the Thiersch operation with a video presentation. We also report the follow-up results of the patients who were operated on with this technique.

Keywords: Proctology, surgery, technique, cerclage

Diagnosis

Thiersch's operation, as originally described by Thiersch in 1891 (1), was devised to treat rectal prolapse. It consists of the insertion of a non-absorbable suture material around the anal canal (cerclage) to narrow of the patulous anus. Silver malleable wire was used initially but later on various materials were used for this purpose (2). Although the results of this method are not as good as desired, it still has an indication for some patients. We demonstrated a simple way of the Thiersch operation (Video 1). We also report the follow-up results of patients who were operated on with this technique.

Surgical Technique

Between 2010 and 2020, ten patients, nine of whom were women treated for rectal prolapse. The median age of the patients were 74.5 (range, 45-82). The operation was performed in the lithotomy position under the local anesthesia in 7 patients and spinal anesthesia in three patients. Number two atraumatic non-absorbable suture material is placed deeply via minor skin incisions outside of the external anal sphincter muscle around the anal canal. Broad spectrum antibiotics were used for the cases and no bowel preparation was done in any of the patients. Preoperative anal manometry is not required in these patients because of the patulous anus. The patients were followed up for median 8 months (range, 7 days-11 months). Sutures were removed in two patients (20%) due to perianal abscess development in a week. Cerclage was performed again in three patients due to suture migration to anal canal in two patients and suture rupture in one patient (30%) (Table 1). Patients were followed up almost one year without any problems. Although clinical improvements were detected in the sphincter tone of the patients, fecal incontinence problems were persisted to some degree. Their standardized incontinence levels were not evaluated before or after the surgery.

Outcome

Thiersch procedure is a simple surgical management option for rectal prolapse in high-risk patients. The advantages of this technique are that it is inexpensive, can be applied under local anesthesia, and can be repeated in case of recurrence. It can be combined with other abdomino-perineal techniques in suitable patients. It also can be used as a temporary treatment until the definitive treatment is planned. The disadvantage of this technique is the high infection and recurrence rates that we encountered in our series and in the literature (3). However, if the suture material remains without complication, both the internal and external sphincter tones improves in time.

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Table 1. Patient characteristics and complications		
	N	%
Female	9	90.0
Male	1	10.0
Age (year) mean; SD (median; min-max)	71.6±10.8	(74.5;45-82)
Local anesthesia	7	70.0
Spinal anesthesia	3	30.0
Followed up period (days) mean; SD (median; min-max)	198.7±105.5	(240.0;7-330)
Suture removal due to anal abscess	2	20.0
Re-do cerclage due to suture migration and rupture	3	30.0
Total complications	5	50.0
SD: Standard deviation.		

Video Link: <https://youtu.be/XDs7Sqhllvc>

Footnotes

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Author Contributions

Concept - G.N., F.A., M.K.G.; Design - G.N., F.A., M.K.G.; Data Collection or Processing - G.N., F.A.; Analysis or Interpretation - G.N.; Literature Search - G.N., F.A.; Writing - G.N., M.K.G.

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REFERENCES

1. Thiersch C. Carl Thiersch 1822-1895. Concerning prolapse of the rectum with special emphasis on the operation by Thiersch. *Dis Colon Rectum*. 1988;31:154-155.
2. Gabriel WB. Thiersch's operation for anal incontinence. *Proc R Soc Med*. 1948;41:467.
3. Barfield LR. Perineal approaches to rectal prolapse. *Clin Colon Rectal Surg*. 2017;30:12-15.