



# **Surgical Treatment of Ventral Hernia and Rectus Diastasis**

av

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Akademisk avhandling

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# Abstract

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**Background:** Postpartum rectus abdominis diastasis (PP-RAD) and primary ventral hernias (PVH) are closely related in women. PP-RAD is caused by separation of the rectus abdominis muscles following pregnancy, leading to core instability and an increased risk of hernia formation. PP-RAD can significantly affect quality of life. The aim of this thesis was to evaluate the risk factors for ventral hernia formation and recurrence. The surgical interventions presented in the thesis aimed to reduce complication and recurrence rates and to improve the quality of life for female patients affected by PP-RAD.

**Paper I** aimed to evaluate reoperation rates due to recurrence in ventral hernia repairs across different genders, ages, and surgical methods. The study concluded that women and patients younger than 50 had significantly higher reoperation rates regardless of repair method.

**Paper II** evaluated the impact of parity and delivery method on risk of PVH. A register study on >1.5 million women. The study concluded that risk of hernia repair increased with number of pregnancies and cesarean sections were associated with higher rate of hernia repairs.

**Paper III and IV** are based on prospective studies evaluating a new Minimally Incision Repair method of Rectus Abdominis Diastasis (MIRRAD) as a day-case surgery. Paper III concluded that MIRRAD is a safe and effective method that can be performed on an outpatient basis, offering a less invasive option for repairing PP-RAD. Paper IV examined the impact of the MIRRAD procedure on patients' quality of life. The findings showed a significant improvement in the quality of life for women with PP-RAD.

**Paper V** is an RCT of 205 procedures comparing the safety and efficacy of placing a ventral hernia patch in the preperitoneal space with repairing with non-absorbable barbed sutures. The study concluded that preperitoneal ventral hernia patch is a safe and effective method with a lower recurrence rate compared to barbed suture repair.

Keywords: Ventral Hernia, Rectus Abdominis Diastasis, Quality of Life

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