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## **Supraumbilical/epigastric Satellite Defects in Umbilical Hernia Repair**

# **The Importance of Ultrasound in Umbilical Hernia Repair**

### **Aim:**

In 2020 Henriksen et al. published the EHS guidelines for the treatment of umbilical and epigastric hernias. Within these guidelines a clinical examination alone was recommended as diagnostic modality, with imaging by ultrasound or CT consideration only in case of doubt. This study wants to show the importance of a preoperative ultrasound investigation that are neglected by the recommendation of the guidelines.

### **Material & Method:**

In a retrospective study we investigated the results of 104 patients that were operated with preperitoneal mesh augmentation. In all patients a preoperative ultrasound was performed, and the defect size, hernia content, degree of rectus diastasis and possible satellite defects investigated. The results were compared with the intraoperative findings.

### **Results:**

Rectus diastasis ranged between 2.0 – 8.0 cm (mean 4.2cm) with a defect size between 1.2 - 4.5 cm (mean 2.4 cm). Supraumbilical satellite defects were detected in 21 patients ( 20.2%), 11 of them already by preoperative ultrasound.

### **Conclusion**

The preoperative ultrasound is easy to perform and gives important information on the morphology of the abdominal wall and hernia characteristics. Surprisingly every fifth patient showed a satellite defect, undetected by clinical examination. The future update of the guidelines might consider the importance of the preoperative ultrasound.