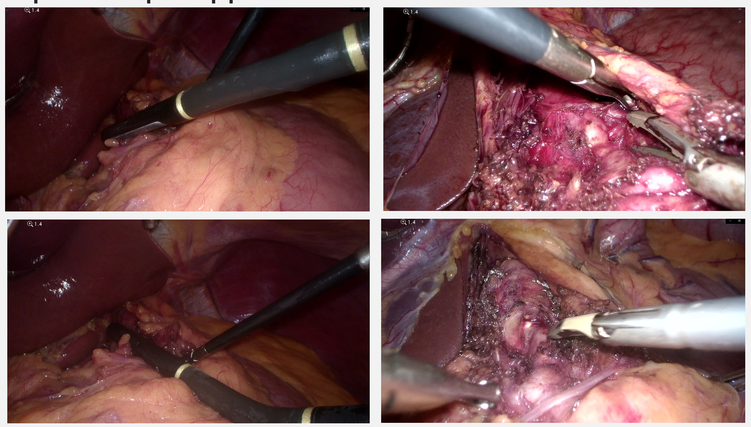
LAPAROSCOPIC TREATMENT OF DUNBAR'S SYNDROME WITH THE USE OF INTRAOPERATIVE ULTRASOUND

TOMASZ GACH, BEATA MARKOWSKA, PAWEŁ BOGACKI, TOMASZ MUSZYŃSKI, MACIEJ CHWAŁA, MIROSŁAW SZURA

DEPARTMENT OF SURGERY, FACULTY OF HEALTH SCIENCES, JAGIELLONIAN UNIVERSITY
ST. JOHN GRANDE HOSPITAL IN KRAKOW, POLAND

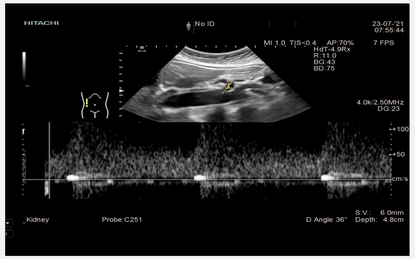
Dunbar syndrome is a rare clinical condition due to the external compression of the celiac trunk by the median arcuate ligament. This syndrome clinically present as postprandial epigastric pain, nausea, weight loss and diarrhea. It is more common in young women. The treatment consists only of surgical decompression by an open or laparoscopic approach.

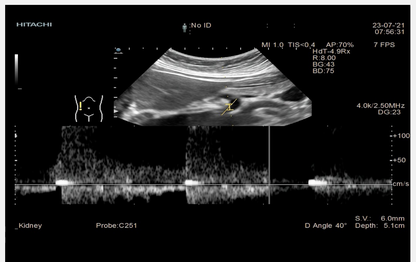


The aim of the study is to analyze the usefulness of intraoperative color-Doppler ultrasound in the assessment of the complete intersection of the ligament fibers around the celiac trunk.



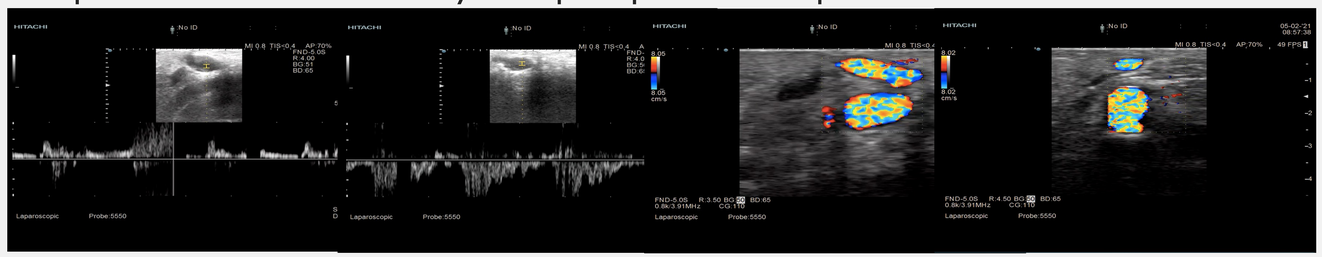






Material and method. The study included 7 consecutive patients (6 women, 1 man) operated between 2018 and 2020 in one center. The mean age was 37.4 years, the mean BMI was 22.4. The diagnosis was made based on symptoms and preoperative computed tomography angiography (CTA). Color-Doppler ultrasonography was performed transabdominally before the procedure, intraoperatively before and after the celiac trunk release.

Results: The mean initial celiac stenosis was 86% in the CTA. The initial intraoperative peak systolic velocity (PSV) mean was 285 cm/s, and after the section of the median arcuate ligament was 145 cm/s. Post-release celiac trunk diameter widening was confirmed in all cases. Activities related to the intraoperative ultrasound examination lasted on average 24 minutes. The mean operation time was 104 minutes, the mean hospitalization time was 1.9 days. No perioperative complications were observed.



Conclusions: Intraoperative color-Doppler ultrasound allows to objectively assess the completeness of the intersection of the arcuate ligament medians. Performing ultrasound during laparoscopic surgery, although it extends the entire procedure, guarantees the accuracy of the treatment.

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