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LAPAROSCOPIC CHOLECYSTECTOMY BY SINGLE INCISION LAPAROSCOPIC SURGERY METHOD – ONE CENTER EXPERIENCE

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Introduction. Since its introduction in the 1980s and 1990s, the technique of conducting laparoscopic cholecystectomy has undergone numerous modifications in order to further minimize operative trauma, and consequently decrease postoperative pain, limit the time required for returning to full life activity as well as achieve a better cosmetic effect. Such motivation and also difficulties with overcoming the obstacles in the introduction of the Natural Orifice Transluminal Endoscopic Surgery (NOTES) enhanced the development of laparoscopic cholecystectomy by single incision laparoscopic surgery (SILS) method in the area of the natural scar, i.e., the navel.

Materials and methods. The retrospective analysis covers the first 100 SILS cholecystectomies performed at the Department of General and Minimally Invasive Surgery of the Warmia and Mazury University Hospital in Olsztyn between 2009 and 2010. The research material comprised 58 surgeries performed by the entry through 3 ports (5 mm) in the navel area and 42 surgeries conducted with the use of SILS multiple instrument access port (Covidien).

Results and discussion. The study group consisted of 88 females and 12 males rated as I and II according to ASA Physical Status Scale. The average age was 44.7 years. Patients' Body Mass Index (BMI) ranged from 19.80 kg/m^2 to 34.59 kg/m^2 (average 25.06 kg/m^2). Surgery time ranged from 35 min to 110 min (on average 62.2 min). In the analyzed material 6 conversions were necessary: in 1 case an additional 5 mm trocar was introduced, and in 5 cases the procedure was completed with a traditional laparoscopic cholecystectomy. Complications included 2 cases of right-sided pulmonary edema, 2 cases of pathological bile leak (overlooked duct of Lushka injury and

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cystic duct stump leak) and 4 complications concerning postoperative wound: navel marginal skin necrosis, granuloma, seroma and navel wound inflammation.

Conclusions. On the basis of our experience, we can conclude that SILS cholecystectomy can be an alternative to the classic laparoscopic cholecystectomy, especially in young patients with BMI not exceeding 35 kg/m^2, without serious systemic diseases, operated electively due to mild cholesyctopathies. The major advantage of employing this technique is a very good cosmetic effect, and in the postoperative period – less pain, minimized necessity of administering analgesics and a shorter hospital stay.