Laparoscopic Approach to Ovarian Dermoid Cysts

E. Târcoveanu, A. Vasilescu, Şt. Georgescu, N. Dãnilã, C. Bradea, C. Lupaşcu, E. Cotea, F. Crumpei, D. Vintilã, R. Moţoc-Vieriu, G. Dimofte First Surgical Clinic, "St. Spiridon" Hospital Iaşi, Romania "Gr. T. Popa" University of Medicine and Pharmacy Iaşi, Romania

Abstract

Introduction: Ovarian dermoid cysts (mature cystic teratomas) are a benign type of germ cell tumours and the most common ovarian neoplasms in women of fertile age. The aim of this study was to analyze the safety of the laparoscopic approach in ovarian dermoid cysts.

Methods: We performed a prospective study between 2006 and 2010 including 38 mature cystic teratomas treated either laparoscopically or by open access. All preoperative and postoperative data were included in an MS Access database and statistically analysed with SPSS v. 17 for Windows.

Results: The study group was divided into 2 subgroups according to the approach: laparoscopic (25 cases – 2 conversions) and classic (13 cases). The mean age of the patients was 40.34 years (range 19-74): 36.92 years for laparoscopic group and significantly higher 46.21 years for open approach group. Twelve cases were admitted as emergencies either because of complications (torsion or rupture of the teratoma) (11 cases) or associated with acute appendicitis (one case). The latter did not influence the decision for open or laparoscopic approach. Only 29 out of 38 cases had preoperative measurement of CA 125. CA 19-9 was performed in 27 cases and elevated levels were found in 21 cases (78%). Cysts over 10 cm presented higher values of CA 19-9. The mean cysts diameter was 11.29 cm (range 2-27 cm): 13.93 cm mean cyst diameter for open approach vs 9.75 cm for laparoscopic approach. The specimen removal required aspiration of the content for cysts bigger the 10 cm in laparoscopic approach. Mean hospital stay was 4.05 days (range 2-6 days) for the laparoscopic group, significantly lower when compared with the open approach group: 6.96 days (range 5-16 days).

Conclusions: Laparoscopic management of ovarian dermoid tumours is a safe and efficient procedure. It does not increase complications rate in comparison with the open approach, offering a shorter hospital stay, a quick recovery and very important, it allows a conservative treatment, especially in premenopausal women who want to be pregnant.

Key words: ovarian dermoid cyst, mature cystic teratoma, laparoscopy, ovarian benign tumour

Corresponding author: Alin Vasilescu, MD, PhD

First Surgical Clinic, "St. Spiridon" Hospital

Independenței Street, No 1, 700111, Iași, Romania

E-mail: vasilescu.alin@gmail.com