Chirurgia (Bucur). 2023;118(2):187-201
http://dx.doi.org/10.21614/chirurgia.2827

# Surgical and Anatomical Basics of Pelvic Debulking Surgery for Advanced Ovarian Cancer – the "Hudson Procedure" as a Cornerstone of Complete Cytoreduction

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**Abstract**

Ovarian cancer (OC) is the fifth most common cause of death in women and accounts for more deaths than any other cancer of the female reproductive tract. OC usually spreads through peritoneal dissemination and direct invasion. Optimal cytoreduction (no macroscopic residual disease) and adjuvant platinum-based chemotherapy are the fundaments of OC treatment. OC is usually diagnosed at advanced stages, hence the obliteration of the Douglas pouch by the tumor as well as disseminated pelvic peritoneal carcinomatosis are commonly seen. Radical surgical cytoreduction typically requires a retroperitoneal approach to the pelvic masses and multivisceral resections in the upper abdomen. In 1968, Christopher Hudson introduced a new retroperitoneal surgical technique ("radical oophorectomy") for fixed ovarian tumors. Since then, numerous modifications have been described, including visceral peritonectomy, the "cocoon" technique, Bat-shaped en-bloc total peritonectomy (Sarta-Bat approach), or en-bloc resection of the pelvis. Although these modifications expanded the classical description in many ways, the concepts and key surgical steps are derived from the Hudson procedure. However, there are some gaps or disagreements regarding the anatomical or practical rationale for certain surgical steps. The purpose of this article is to outline the critical steps of radical pelvic cytoreduction ("Hudson procedure"), and to delineate the anatomical basis for the procedure in the proposed form. In addition, we discuss the controversies and address the perioperative morbidity associated with the procedure.

**Key words:** ovarian cancer, Hudson procedure, anatomical basis, perioperative morbidity