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REVIEW ARTICLE

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Precancerous lesions of the cervix — aetiology, classification, diagnosis, prevention

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ABSTRACT

The present review introduces the aetiology and classification of cervical precancers. The principles of diagnosis based on colposcopy are reviewed. The indications for colposcopy and targeted biopsy are steps in the diagnostic process of cervical precancers. Prophylaxis of these diseases prevents cervical cancer as high-grade precancerous lesions represent a direct precursor to cervical cancer. The basics of primary and secondary prevention, the types of screening, and the behaviour of the already-alerted patients after different screenings are presented.

Key words: colposcopy, targeted biopsy, cervical precancerous lesions, cytospin, HPV vaccines, HPV screening

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2. Yordanov, A., Janeva, K., Mateva, S., Kornovski, Y., **Kostov, S.**, Slavchev, S., Ivanova, Y., Nikolova, M. *Primary ovarian synovial sarcoma — a case report*. *Experimental Oncology*, 2022, 44(4):334-336; ISSN: 1812-9269

PRIMARY OVARIAN SYNOVIAL SARCOMA — A CASE REPORT

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Synovial sarcoma is an aggressive soft tissue sarcoma, which most often occurs in the limbs near the joints. It accounts for 5–10% of all soft tissue sarcomas. It extremely rarely affects the pelvis. So far, only 4 cases of primary involvement of the adnexa have been described. We present a case of a 77-year-old female patient diagnosed with a rapidly growing pelvic formation, subsequently diagnosed as monophasic synovial sarcoma of the ovary. Synovial sarcoma derived from the adnexa is a rare disease that is virtually unknown. The diagnosis is complex, and there is a poor prognosis.

Key Words: synovial sarcoma, ovary, prognosis.

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3. Yordanov, A., **Kostov, S.**, Kornovski, Y., Ivanova, Y., Slavchev, S., Kostov, G., Strashilov, S. *Initial presentation of renal cell carcinoma as a vaginal mass with excessive bleeding.* *Przegląd Menopauzalny*, 2022, 21(4): 285-288; ISSN:1643-8876;

Initial presentation of renal cell carcinoma as a vaginal mass with excessive bleeding

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Abstract

Introduction: Renal cancer is the seventh most common cancer in men and the tenth most common cancer in women. Renal cell carcinoma accounts for 3% of all adult malignancies and 85% of all primary renal tumours. It metastasizes most often to the lungs, liver, bones, and brain and very rarely to the vagina.

Case report: We present a case of a 60-year-old patient, in whom the renal cell carcinoma manifested for the first time as an intense bleeding, soft tumour formation with dimensions 4/6 cm originating in the vagina.

Discussion: Renal cell carcinoma metastasizes in about 30% of cases. Metastasizing can be lymphatic, hematogenous, transcoelomic, or by direct invasion. Most commonly it affects the lungs, bones, adrenal glands, liver, lymph nodes, and brain. Much less often, it metastasizes to the thyroid, orbit, nasal structures, vagina, gallbladder, pancreas, sublingual tissues, and soft tissues of distal extremities. Metastases can be synchronous and metachronous. The described cases in the literature of renal cell carcinoma manifested with vaginal metastases are isolated.

Conclusions: We present an extremely rare case of renal cell carcinoma manifested by profuse genital bleeding from a vaginal metastasis. In such cases, especially if the vaginal lesion does not appear as the primary vaginal carcinoma, we must consider the possibility of metastasis from renal carcinoma.

Key words: renal cell carcinoma; vaginal metastasis; diagnosis; treatment.

4. Yordanov, A., Karaivanov, M., **Kostov, S.**, Kornovski, Y., Ivanova, Y., Slavchev, S., Todorova, V., Vasileva-Slaveva, M. *Papillary Squamotransitional Cell Carcinoma of the Uterine Cervix with Atypical Presentation: A Case Report with a Literature Review*. *Medicina (Lithuania)*, 2022, 58(12): art. no. 1838; ISSN: 1010-660X;

Case Report

Papillary Squamotransitional Cell Carcinoma of the Uterine Cervix with Atypical Presentation: A Case Report with a Literature Review

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Abstract: *Introduction:* Cervical cancer is the fourth most prevalent malignancy and the fourth leading cause of cancer-related death in women around the world. Histologically, squamous cell carcinoma (SCC) is the most common form of cervical cancer. SCC has several subtypes, and one of the rarest is papillary squamotransitional cell carcinoma (PSCC). In general, PSCC is believed to have a similar course and prognosis to typical SCC, with a high risk of late metastasis and recurrence. *Case report:* We discuss the case of a 45-year-old patient diagnosed with PSCC who was admitted to our department in December 2021. The clinical manifestations were pelvic discomfort and lymphadenopathy throughout the body. On admission, all laboratory values, with the exception of C-Reactive Protein (CRP) at 22.35 mg/L and hemoglobin (HGB) at 87.0 g/L, were normal. The clinical and ultrasound examination revealed a painful formation with indistinct borders in the right portion of the small pelvis. Following dilation and curettage, a Tru-Cut biopsy of the inguinal lymph nodes was performed. The investigation histologically indicated PSCC. MRI of the small pelvis showed an endophytic tumor in the cervix with dimensions of 35/26 mm and provided data for bilateral parametrial infiltration; a hetero-intensive tumor originating from the right ovary and involving small intestinal loops measuring 90/58 mm; and generalized lymphadenopathy and peritoneal metastases in the pouch of Douglas. The FIGO classification for the tumor was IVB. The patient was subsequently referred for chemotherapy by the tumor board's decision. *Discussion:* Despite the generally good prognosis of SCC, PSCC is a rare and aggressive subtype. It is usually diagnosed at an advanced stage and has a poor prognosis. *Conclusions:* PSCC is a rare subtype of SCC, and its diagnosis and treatment are challenging.

5. Yordanov A, Strateva D, **Kostov S**, Kornovski Y, Slavchev S, Ivanova Y, Nikolova M. *Placental site trophoblastic tumor mimicking an intramural pregnancy: a case report and review of the literature*. Menopause Review/Przegląd Menopauzalny, 2022, 21(2): 142-147; ISSN: 1643-8876;

Placental site trophoblastic tumour mimicking an intramural pregnancy: a case report and review of the literature

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Abstract

Gestational trophoblastic disease (GTD) covers a range of proliferative disorders from non-neoplastic hydatid moles to malignant neoplastic conditions such as choriocarcinoma. The incidence of these diseases is low and often challenging to diagnose. Placental site trophoblastic tumour (PSTT) is the rarest form of GTD, accounting for up to 3% of all cases. We present a case of a 35-year-old patient diagnosed with PSTT mimicking an intramural pregnancy. Placental site trophoblastic tumour occurred after pregnancy, which ended as a blighted ovum. β -hCG was not very high, and the patient had no complaints. The diagnosis was made after resection of formation which was accepted for intramural pregnancy. To our knowledge, this is the first such case described in the literature. A hysterectomy performed later confirmed the absence of a residual tumour after conservative intervention. The lack of distant metastases, confirmed by positron emission tomography-computed tomography scan, allowed for only hysterectomy with bilateral salpingo-oophorectomy to be performed. The patient was classified as low risk according to the World Health Organization (WHO) scoring system.

Placental site trophoblastic tumour is a rare malignant tumour (despite its WHO coding) from the group of GTDs. It is not presented with a classic clinical picture, and its clinical diagnosis is challenging. However, clinicians should consider it in the case of unclear events after any type of pregnancy.

Key words: gestational trophoblastic disease, placental site trophoblastic tumour, prognosis, treatment.

6. **Kostov, S.**, Watrowski, R., Kornovski, Y., Dzhankov, D., Slavchev, S., Ivanova, Y., Yordanov, A. *Hereditary Gynecologic Cancer Syndromes – A Narrative Review*. *OncoTargets and Therapy*, 2022, 15, pp. 381-405; ISSN: 1178-6930;

Hereditary Gynecologic Cancer Syndromes – A Narrative Review

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Abstract: Hereditary cancer syndromes are defined as syndromes, where the genetics of cancer are the result of low penetrant polymorphisms or of a single gene disorder inherited in a mendelian fashion. During the last decade, compelling evidence has accumulated that approximately 5–10% of all cancers could be attributed to hereditary cancer syndromes. A tremendous progress has been made over the last decade in the evaluation and management of these syndromes. However, hereditary syndromes associated with gynecologic malignancies still present significant challenge for oncogynecologists. Oncogynecologists tend to pay more attention to staging, histological type and treatment options of gynecological cancers than thinking of inherited cancers and taking a detailed family history. Moreover, physicians should also be familiar with screening strategies in patients with inherited gynecological cancers. Lynch syndrome and hereditary breast-ovarian cancer syndrome are the most common and widely discussed syndromes in medical literature. The aim of the present review article is to delineate and emphasize the majority of hereditary gynecological cancer syndromes, even these, which are rarely reported in oncogynecology. The following inherited cancers are briefly discussed: Lynch syndrome; "site-specific" ovarian cancer and hereditary breast-ovarian cancer syndrome; Cowden syndrome; Li-Fraumeni syndrome; Peutz-Jeghers syndrome; ataxia-telangiectasia; DICER1- syndrome; gonadal dysgenesis; tuberous sclerosis; multiple endocrine neoplasia type I, II; hereditary small cell carcinoma of the ovary, hypercalcemic type and hereditary undifferentiated uterine sarcoma; hereditary diffuse gastric cancer and MUTYH-associated polyposis. Epidemiology, pathogenesis, diagnosis, pathology and screening of these syndromes are discussed. General treatment recommendations are beyond the scope of this review.

Keywords: hereditary gynecologic cancer syndromes, pathogenesis, diagnosis, pathology, screening

7. Jordanov, A., Shivarov, V., **Kostov, S.**, Ivanova, Y., Dimitrova, P., Popovska, S., Tsoneva, E., Vasileva-Slaveva, M. *Prognostic Utility of CD47 in Cancer of the Uterine Cervix and the Sensitivity of Immunohistochemical Scores*. *Diagnostics*, 2023, 13(1): art. no. 52; ISSN: 2075-4418;

Prognostic Utility of CD47 in Cancer of the Uterine Cervix and the Sensitivity of Immunohistochemical Scores

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Abstract: Introduction: Cancer of the uterine cervix (CUC) is still one of the most frequent oncological diagnoses in women. The specific interactions between the tumor cells of CUC and the cells and tissues in the tumor microenvironment can affect cancer cells' invasive and metastatic potential and can modulate tumor's progression and death. CD47 is a trans-membranous immunoglobulin, expressed in many cells. It protects the cells from being destroyed by the circulating macrophages. Aim: We aimed to evaluate the prognostic role of CD47 expressed in the tumor tissues of patients with CUC for tumor progression and to find the most sensitive immunohistochemical score for defining the cut-off significantly associated with tumor biology and progression. Materials and methods: Paraffin-embedded tumor tissues from 86 patients with CUC were included in the study. Clinicomorphological data for patients, such as age and stage at diagnosis according to FIGO and TNM classification, were obtained from the hospital electronic medical records. Immunohistochemical staining was performed with rabbit recombinant monoclonal CD47 antibody (Clone SP279). The final result was interpreted based on three reporting models in immunohistochemistry: H-score, Allred score and combined score. Results: The expression of CD47 was higher in tumors limited in the cervix compared with those invading other structures, and it did not depend on the nodal status. The results of immunohistochemical staining were similar regardless of which immunohistochemical method was used. The most significant correlation with TNM stage was observed with the H-score ($p = 0.00018$). The association with the Allred and combined score was less significant, with p values of 0.0013 and 0.0002, respectively. Conclusion: The expression of CD47 in the cancer cells is prognostic for tumor invasion in the surrounding structures, independent of lymph node engagement. The H-score is the most sensitive immunohistochemical score to describe tumor stage. To the best of our knowledge, this is the first study evaluating the significance of CD47 expression in CUC.

Keywords: cancer of the uterine cervix; CD47; expression; immunohistochemical scores



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- Kostov, S.**, Kornovski, Y., Ivanova, Y., Slavchev, S., Yordanov, A. *Laparoscopic Ovarian Transposition for Young Patients with Locally Advanced Cervical Cancer Treated by Primary Chemoradiation: A Step-by-Step Surgical Technique Video*. *Surgery, Gastroenterology and Oncology*, 2023, 28(2): 117-118.; ISSN: 2601-1700;

Laparoscopic Ovarian Transposition for Young Patients with Locally Advanced Cervical Cancer Treated by Primary Chemoradiation: A Step-by-Step Surgical Technique Video

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ABSTRACT

Cervical cancer is the fourth most common gynecological malignancy. It is a major health problem commonly affecting women in a young age. It is well known that the majority of cervical cancer cases are related to human papilloma virus. Therefore, in Europe the rate of cervical cancer is expected to decrease due to human papilloma virus vaccination (1-3). However, the discrepancy in cervical cancer cases is clearly seen between Eastern and Western European countries. Moreover, the estimated age-standardized incidence rate of cervical cancer is the highest in Bulgaria among all European countries (1-3). Surgery is the standard treatment therapy in early stages, whereas concurrent pelvic radiotherapy combined with chemotherapy is the preferable treatment modality in advanced cases (4). Annual cases of Bulgaria are one of the highest in Europe. The five-year relative overall survival for women with cervical cancer remains unacceptable low in Bulgaria. The reasons for this epidemiology crisis are due to the low vaccination rate (less than 6% for the first dose) and lack of population-based screening program. Approximately, one fifth of the patients are diagnosed between the age of 35 and 44 year. The incidence of patients diagnosed at advanced stage of the disease is expecting to high (1-3). Ovarian transposition could be an option for inoperable patients with advanced cervical cancer, which are referred to definitive chemoradiation. Ovarian transposition will probably prevent menopausal induced osteoporosis, cardiovascular morbidity and vaginal atrophy. Additionally, OT is an alternative method for patient with advanced cervical cancer desiring pregnancy. Herein, we described step by step laparoscopic ovarian transposition in cases of advanced cervical cancer. Patient selection criteria, surgical considerations during the procedure and postoperative complications are also highlighted in detail (5). Laparoscopic ovarian transposition is superior to the laparotomy, as it has fast recovery rate and reduced hospital stay. Therefore, the definitive treatment will not be delayed. Although ovarian transposition is not a curative procedure, it could improve the quality of life of patients with advanced cervical cancer referred to definitive chemoradiation.

Key words: advanced cervical cancer, laparoscopy, ovarian transposition, surgical considerations

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9. Kostov, S., Dineva, S., Kornovski, Y., Slavchev, S., Ivanova, Y., Yordanov, A. *Vascular Anatomy and Variations of the Anterior Abdominal Wall – Significance in Abdominal Surgery*. Prague Medical Report, 2023, 124(2): 108-142; ISSN: 1214-6994;

Vascular Anatomy and Variations of the Anterior Abdominal Wall – Significance in Abdominal Surgery

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Key words: Anatomy – Anterior abdominal wall – Vessels variations – Abdominal incisions – Laparoscopic trocar placement – Perioperative complications

Abstract: Detailed knowledge of the human anatomy is an integral part of every surgical procedure. The majority of surgery related complications are due to a failure to possess appropriate knowledge of human anatomy. However, surgeons pay less attention of the anatomy of the anterior abdominal wall. It is composed of nine abdominal layers, which are composed of fascias, muscles, nerves, and vessels. Many superficial and deep vessels and their anastomoses supply the anterior abdominal wall. Moreover, anatomical variations of these vessels are often presented. Intraoperative and postoperative complications associated with entry and closure of the anterior abdominal wall could compromise the best surgical procedure. Therefore, sound knowledge of the vascular anatomy of the anterior abdominal wall is fundamental and a prerequisite to having a favourable quality of patient care. The purpose of the present article is to describe and delineate the vascular anatomy and variations of the anterior abdominal wall and its application in abdominal surgery. Consequently, the most types of abdominal incisions and laparoscopic accesses will be discussed. Furthermore, the possibility of vessels injury related to different types of incisions and accesses will be outlined in detail. Morphological characteristics and distribution pattern of the vascular system of the anterior abdominal wall is illustrated by using figures either from open surgery, different types of imaging modalities or embalmed cadaveric dissections. Oblique skin incisions in the upper or lower abdomen such as McBurney, Chevron and Kocher are not the topic of the present article.

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10.Kostov, S., Kornovski, Y., Watrowski, R., Slavchev, S., Ivanova, Y., Yordanov, A. *Surgical and Anatomical Basics of Pelvic Debulking Surgery for Advanced Ovarian Cancer - the “Hudson Procedure” as a Cornerstone of Complete Cytoreduction.* Chirurgia (Romania), 2023, 118(2): 187-201; ISSN: 1221-9118;

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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Abbreviations

OC: ovarian cancer;
EnBSP: en-bloc resection of the pelvis;
TROMP: en-bloc resection of multivisceral-peritoneal packet;
LPP: lateral parietal peritoneum;
U: ureter;
LPS: lateral paravesical space;
MPS: medial paravesical space;
LS: Lazko space;
OS: Okabayashi space;
CL: cardinal ligament;
IA: internal iliac artery;
UA: umbilical artery;
ON: obturator nerve;
SUL: sacrotuberine ligament;
PMM: psoas major muscle;
U: uterus;
EA: external iliac artery;
EV: external iliac vein;
BL: bladder;
UA: uterine artery;

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Rezumat

Bazele chirurgicale și anatomice ale chirurgiei de debulking pelvin pentru cancerul ovarian avansat - „Procedura Hudson” ca piatră de temelie a citoreducției complete

Cancerul ovarian (CO) este a cincea cea mai frecventă cauză de deces la femei și produce mai multe decese decât orice alt cancer al tractului reproducător feminin. CO se răspândește, de obicei, prin diseminare peritoneală și invazie directă. Citoreducția optimă (fără boală reziduală macroscopică) și chimioterapia adjuvantă pe bază de platină sunt fundamentele tratamentului CO. CO este, de obicei, diagnosticat în stadii avansate. Prin urmare, invazia fundului de sac Douglas de către tumoră, precum și carcinomatoza peritoneală pelviană diseminată sunt frecvent observate. Citoreducția chirurgicală radicală necesită, de obicei, o abordare retroperitoneală a maselor tumorale pelviene și rezecții multiviscerale în abdomenul superior. În 1968, Christopher Hudson a introdus o nouă tehnică chirurgicală retroperitoneală („oofor-rectomie radicală”) pentru tumorile ovariene fixe. De atunci, au fost descrise numeroase modificări, inclusiv peritonectomia viscerală, tehnica „cocon”, peritonectomia totală în bloc în formă de liliac (abord Sarta-Bat) sau rezecția en-bloc a pelvisului. Deși aceste modificări au extins descrierea clasică în numeroase moduri, conceptele și etapele chirurgicale cheie sunt derivate din procedura Hudson. Cu toate acestea, există unele lacune sau dezacorduri cu privire la rațiunea anatomică sau practică pentru

MR: mesorectum;
 PS: presacral space;
 IFA: inter-basilar approach;
 TMRA: trans-mesorectal approach;
 PMM: psoas major muscle;
 MSA: median sacral artery;
 R: rectum;
 Pr: promontory;
 SRA: superior rectal artery;
 LIA: left internal iliac artery;
 LCV: left common iliac vein;
 RClA: right common iliac artery;
 LClA: left common iliac artery;
 LEV: left external iliac vein;
 AP: anterior peritoneum;
 OTu: ovarian tumor;
 SP: symphysis pubis;
 LP: lateral peritoneum;
 AVW: anterior vaginal wall;
 PVW: posterior vaginal wall;
 RVS: rectovaginal space;
 RSH: rectal shaving of the anterior abdominal wall;
 SG: sigma;
 MSC: mesocolon;
 RS: rectosigmoid colon.

anumite etape chirurgicale. Scopul acestui articol este de a sublinia etapele critice ale citoreducției pelvine radicale („procedura Hudson”) și de a stabili care este baza anatomică a procedurii în forma propusă. În plus, discutăm controversele și abordăm morbiditatea perioperatorie asociată procedurii.

Cuvinte cheie: cancer ovarian, procedura Hudson, baza anatomică, morbiditate perioperatorie

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 fundamentals 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

11.Kornovski, Y., Metodiev, D., Ivanova, V., **Kostov, S.**, Slavchev, S., Ivanova, Y., Yordanov, A. *Cold knife conization for cervical cancer in the second trimester of pregnancy: a case report.* Gazzetta Medica Italiana Archivio per le Scienze Mediche, 2023, 182(4): 231-234; ISSN: 0393-3660;

CASE REPORT

Cold knife conization for cervical cancer in the second trimester of pregnancy: a case report

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ABSTRACT

Cervical cancer is one of the most common oncologic diseases, diagnosed during pregnancy and its management significantly varies depending on the stage of the cancer, the age of the pregnancy, and the patient's wishes. We present a case of a 31-year-old multiparous woman, diagnosed with cervical cancer during routine pregnancy monitoring at 12 weeks of gestation. Due to desire to keep the pregnancy, the cervical cancer was treated during the 14th gestational weeks of the pregnancy and a cold knife conization was done. The pregnancy was successful with a normal delivery in 39th gestational week. The presented case is an example for the role and importance of colposcopy in the diagnostic management of abnormal cytology, diagnosed during pregnancy.

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KEY WORDS: Pregnancy; Conization; Uterine cervical neoplasms.

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1. **Stoyan Kostov** , Angel Yordanov , Stanislav Slavchev , Strahil Strashilov. A fatal case of classic Potter's Syndrome. Gazzetta Medica Italiana - Archivio per le Scienze Mediche 2020 May;179(5):372-4; DOI: 10.23736/S0393-3660.19.04205-0; ISSN 03933660;

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CASE REPORT

A fatal case of classic Potter's Syndrome

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ABSTRACT

Potter's sequence is a rare and fatal disease. There are four types of Potter's Syndrome. Neonates with classical Potter's sequence are with oligohydramnios and bilateral renal agenesis. They die shortly after birth because of severe respiratory distress due to pulmonary hypoplasia. Babies have typical physical features — Potter's face, absence of kidneys and skeletal malformations. We report a fatal case of Potter's sequence with a typical physical appearance. We performed an autopsy after the delivery.

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KEY WORDS: Hereditary renal agenesis; Oligohydramnios; Body physical appearance.

2. **Kostov, S.**, Slavchev, S., Dzhankov, D., Strashilov, S., & Yordanov, A. (2020). An unusual case of fulminant generalized peritonitis secondary to purulent salpingitis caused by *Prevotella bivia* - case report with literature review. *Germs*, 10(1), 51-54. <https://doi.org/10.18683/germs.2020.1185>; ISSN 22482997;

An unusual case of fulminant generalized peritonitis secondary to purulent salpingitis caused by *Prevotella bivia* – case report with literature review

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Abstract

Introduction *Prevotella* bacilli are prevalent in the body as members of the normal flora and in some cases they can be involved in infections throughout the body. *Prevotella bivia* is a member of a nonpigment group found in the resident flora of the female genital tract and it is occasionally seen in the oral cavity.

Case report We describe the very rare case of a 39-year-old woman with fulminant generalized peritonitis secondary to purulent salpingitis caused by *Prevotella bivia*.

Discussion In most cases described in the literature, *Prevotella bivia* was mixed with aerobes and caused bacterial vaginosis and pelvic inflammatory disease, whereas in our case study *Prevotella bivia* was the only microbe that was isolated. The infection was fulminant and caused generalized peritonitis. Rapid and systemic infections typically occur in immunocompromised hosts, however our patient was in good health condition and immunocompetent.

Conclusions *Prevotella bivia* may cause rapid and systemic infections, even in immunocompetent hosts. Multidisciplinary team management is mandatory in order to estimate the optimal treatment regimen.

Keywords *Prevotella bivia*, fulminant generalized peritonitis, surgery

Introduction

The genus *Prevotella* includes both pigmented and nonpigmented bacilli that were previously classified as genus *Bacteroides*.¹ *Prevotella* bacilli are prevalent in the body as members of the normal

flora. However, in some cases they can be involved in infections throughout the body.² *Prevotella bivia* is a member of a nonpigment group found in the resident flora of the female genital tract and it is occasionally seen in the oral cavity.^{3,4} *P. bivia* is associated with infections in the female urogenital tract. The growth of *P. bivia* increases during the follicular phase of the menstrual cycle due to the increased levels of estrogen.^{3,5,7} *P. bivia* can be associated with infections in rare locations of the body such as chest wall, intervertebral discs, paronychia and knee joint.^{5,7,8} We describe a very rare case of a

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3. **Kostov S**, Slavchev S, Dzhenkov D, Strashilov S, Yordanov A. Discordance for Potter's Syndrome in a Dichorionic Diamniotic Twin Pregnancy—An Unusual Case Report.



Case Report

Discordance for Potter's Syndrome in a Dichorionic Diamniotic Twin Pregnancy—An Unusual Case Report

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Abstract: Introduction: Potter's syndrome, also known as Potter's sequence, is an uncommon and fatal disorder. Potter's sequence in a multiple pregnancy is uncommon, and its frequency remains unknown. Worldwide in a diamniotic twin pregnancy, there are only a few cases described. Case report: We present an unusual case discordance for Potter's syndrome in a dichorionic diamniotic twin pregnancy. Twin A had the typical physical and histological Potter's findings. Twin B had normal respiratory function and normal physical examination findings. There are many controversies about this condition in diamniotic twin pregnancy. One case report concluded that the presence of a normal co-twin in diamniotic pregnancy prevented the cutaneous features seen in Potter's syndrome and ameliorated the pulmonary complications, whereas two other case studies reported that the affected twin had extrarenal features typical of the syndrome. Conclusion: We performed an autopsy and calculated lung weight/body weight ratio to diagnose pulmonary hypoplasia. Histopathologic examination of lungs and kidneys was performed. We concluded that the appearance of extrarenal features in the affected twin depends on the amniocity.

Keywords: potter's sequence; dichorionic; oligohydramnios; extrarenal features; pulmonary hypoplasia

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Case Report

Pregnancy and Childbirth in Uterus Didelphys: A Report of Three Cases

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Abstract: Uterus didelphys is a rare form of congenital anomaly of the Müllerian ducts. The clinical significance of this anomaly of the female reproductive tract is associated with various reproductive issues: increased risk of preterm birth before 37 weeks' gestation, abnormal fetal presentation, delivery by caesarean section, intrauterine fetal growth restriction, low birth weight less than 2500 g, and perinatal mortality. We present three cases of uterus didelphys and full-term pregnancy, which resulted in favorable birth outcomes of live-born, full-term infants. In two of the cases, delivery was performed via Caesarean section: due to lack of labor activity in one of the cases and lack of response to oxytocin stimulation in the second case. The weight of two of the new-born infants was lower than expected for the gestational age.

Keywords: congenital anomalies of the Müllerian ducts; uterus didelphys; pregnancy; outcome

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Review

New Aspects of Sarcomas of Uterine Corpus—A Brief Narrative Review

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Abstract: Sarcomas of the uterine corpus are rare malignant neoplasms, which are further classified into mesenchymal tumors, and mixed (epithelial plus mesenchymal) tumors. The main issues concerning these neoplasms are the small number of clinical trials, insufficient data from evidence-based medicine, insignificant interest from the pharmaceutical industry, all of which close a vicious circle. The low frequency of these malignancies implies insufficient experience in the diagnosis, hence incomplete surgical and complex treatment. Additionally, the rarity of these sarcomas makes it very difficult to develop clinical practice guidelines. Preoperative diagnosis, neoadjuvant and adjuvant chemoradiation, target and hormone therapies still raise many controversies. Disagreements about the role and type of surgical treatment are also often observed in medical literature. There are still insufficient data about the role of pelvic lymph node dissection and fertility-sparing surgery. Pathologists’ experience is of paramount importance for an accurate diagnosis. Additionally, genetics examinations become part of diagnosis in some sarcomas of the uterine corpus. Some gene mutations observed in uterine sarcomas are associated with different outcomes. Therefore, a development of molecular classification of uterine sarcomas should be considered in the future. In this review, we focus on the epidemiology, pathogenesis, pathology, diagnosis and treatment of the following sarcomas of the uterine corpus: leiomyosarcoma, low- and high-grade endometrial stromal sarcomas, undifferentiated sarcoma and adenosarcoma. Uterine carcinosarcomas are excluded as they represent an epithelial tumor rather than a true sarcoma.

6. Watrowski R, **Kostov S**, Alkatout I. Complications in laparoscopic and robotic-assisted surgery: definitions, classifications, incidence and risk factors – an up-to-date review. *Videosurgery and Other Miniinvasive Techniques*. 2021;16(3):501-525.

Complications in laparoscopic and robotic-assisted surgery: definitions, classifications, incidence and risk factors – an up-to-date review

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Abstract

Almost all gynecological and general-surgical operations are – or can be – performed laparoscopically. In comparison to an abdominal approach, the minimally invasive access offers several advantages; however, laparoscopy (both conventional and robotic-assisted) can be associated with a number of approach-specific complications. Although the majority of them are related to the laparoscopic entry, adverse events may also occur due to the presence of pneumoperitoneum or the use of laparoscopic instruments. Unfortunately, a high proportion of complications (especially affecting the bowel and ureter) remain unrecognized during surgery. This narrative review provides comprehensive up-to-date information about definitions, classifications, risk factors and incidence of surgical complications in conventional and robotic-assisted laparoscopy, with a special focus on gynecology. The topic is discussed from various perspectives, e.g. in the context of stage of surgery, injured organs, involved instruments, and in relation to malpractice claims.

Key words: complications, risk factors, incidence, classification, gynecological laparoscopy, robotic-assisted surgery.

7. **Kostov, S.**, Dzhankov, D., Metodiev, D., Kornovski, Y., Slavchev, S., Ivanova, Y., & Yordanov, A. (2021). A case of human papillomavirus infection and vulvar cancer in a young patient - "hit and run" theory. *Gynecologic oncology reports*, 36, 100760. <https://doi.org/10.1016/j.gore.2021.100760>; ISSN: 2352-5789;



Case report

A case of human papillomavirus infection and vulvar cancer in a young patient – “hit and run” theory



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ABSTRACT

Vulvar cancer (VC) is a rare disease, of which the squamous vulvar carcinomas (SVCs) are the most common histological subtype. SVC is often associated with human papillomavirus (HPV) infection. HPV- positive SVCs are multifocal, typically have non-keratinizing morphology, presence of koilocytes and tend to arise in younger women (<50 years), which are often smokers. The “hit and run” theory has been a subject of longstanding curiosity in tumor virology. The “hit and run” scenario suggests that viruses have an activating role in the cancer development and the viral genome may disappear after the host cell accumulates numerous mutations.

Herein, a case of HPV- positive SVC in a 22-year-old patient with a possible “hit and run” scenario, is presented. Gynecological examination revealed a vulvar mass (3 cm) with ulcerated surface, located at the left Bartholini gland area. Punch biopsies of the lesion were performed. The histopathological examination revealed non-keratinizing squamous cell carcinoma (Grade 2) of the vulva and presence of koilocytes. P16 immunostaining was block-positive. HPV-testing of the specimen was negative.

In the majority of cases, VC arising in young patients is associated with HPV. VC located in the BG area should be distinguished from BG carcinoma. Future studies should reconsider the third diagnostic (histological areas of apparent transition from normal elements to malignant ones) criteria for defining BG carcinoma. The “hit and run” theory is rarely mentioned in oncology, but should be considered in cancer- associated viruses. The “hit and run” affair suggests that viruses may cause more cancers than previously thought.

8. **Kostov, S.**, Kornovski, Y., Slavchev, S., Ivanova, Y., Dzhenukov, D., & Yordanov, A. et al. (2021). Pseudomyxoma peritonei of appendiceal origin mimicking ovarian cancer – a case report with literature review. *Menopause Review/Przegląd Menopauzalny*, 20(3), 148-153.

Pseudomyxoma peritonei of appendiceal origin mimicking ovarian cancer – a case report with literature review

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Abstract

Pseudomyxoma peritonei (PMP) is a rare and uncommon condition, characterized by the presence of mucinous ascites in the abdominal cavity. The most common cause of PMP is mucinous adenocarcinoma of the appendix, followed by neoplasms of the ovary, endocervix, fallopian tube, alimentary organs, urachus, urinary bladder, lung, mucinous cyst of the spleen, and breast.

Herein, we report a case of a 64-year-old postmenopausal woman (gravida 2, para 2) who presented at the department of gynecology with a short history of nausea and abdominal distention. Abdominal and vaginal ultrasonography showed a large amount of free fluid in the pelvis with hyperechoic echogenicity and right pelvic tumor with mixed echogenicity. Computed tomography demonstrated the presence of a heterogeneous, hypodense mass, without contrast enhancement, located on the right side of the pelvis, near the right ovary. Laparotomy was performed. Revision of the abdominal cavity revealed a large amount of yellow gelatinous mucinous ascites – approximately 1.5 l. A tumor (6 x 7 cm in diameter), arising from the appendix and located in the pouch of Douglas near the right ovary, was observed. Histopathology examination revealed poorly differentiated mucinous appendiceal adenocarcinoma, comprising up to 50% signet ring cells.

Gastrointestinal tumors such as appendiceal neoplasms combined with PMP may mimic ovarian carcinomas. Computed tomography, abdominal/vaginal ultrasonography and tumor marker levels (carcino-embryonic antigen, carbohydrate antigen 19.9, carbohydrate antigen Ca-125) may establish the diagnosis.




A differential diagnosis with appendiceal tumors should be considered for patients with right pelvic masses.

Key words: appendiceal neoplasm, pseudomyxoma peritonei, ovarian tumors, mucin, appendectomy.

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Case Report

Ovarian Carcinosarcoma with Retroperitoneal Para-Aortic Lymph Node Dissemination Followed by an Unusual Postoperative Complication: A Case Report with a Brief Literature Review

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Abstract: Introduction. Ovarian carcinosarcoma (OCS), also known as malignant mixed Müllerian tumour (MMMT), is one of the rarest histological subtypes of ovarian cancer. It is an aggressive tumour with a dismal prognosis—the median survival of patients is less than two years. The rarity of the disease generates many controversies about histogenesis, prognostic factors and treatment of OCS. Histologically, OCS is composed of an epithelial and sarcomatous component. **Case report.** In the present case, a patient with bilateral ovarian cysts and bulky paraaortic lymph nodes is reported. Retroperitoneal paraaortic lymph node metastases were the only extrapelvic dissemination of OCS. The patient underwent comprehensive surgical staging procedures, including total abdominal hysterectomy and bilateral salpingo-oophorectomy, supracolic omentectomy and selective para-aortic lymphadenectomy. Histologically the ovarian carcinosarcoma was composed of an epithelial component (high-grade serous adenocarcinoma) and three sarcomatous components (homologous—endometrial stromal cell sarcoma, and heterologous—chondrosarcoma, rhabdomyosarcoma). Immunohistochemistry staining was performed. A postoperative complication (adhesion between the abdominal aorta and terminal ileum causing obstructive ileus) that has never been reported in the medical literature occurred. **Conclusion.** Carcinosarcomas are carcinomas with epithelial–mesenchymal transition and heterologous differentiation. Retroperitoneal pelvic and paraaortic lymph nodes should be carefully inspected in patients with ovarian tumours. Adhesions between the small bowels and abdominal aorta are possible complications after lymph node dissection in the paraaortic region.

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REVIEW

Rare malignant ovarian tumors-classification, incidence rate, prognosis and treatment

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ABSTRACT

The ovary is the most complex organ in the human body from a histological point of view. This is based on the rich variety of ovarian tumor formations that occur in it. In the ovary, in addition to non-proliferating, proliferating tumors also occur, which in turn can be benign, borderline and malignant. The most common malignancy is high-grade serous carcinoma, which accounts for 80% of all malignancies. Other neoplasms classified as rare malignant ovarian tumors are a very heterogeneous group in terms of biology, malignant potential, prognosis, and sensitivity to chemotherapy. The wide variety of histological types, the low incidence rate and the different aggressiveness of these tumors make them a challenge for pathologists, oncogynecologists and chemotherapists. With this review, we attempted to synthesize the most up-to-date literature data on the incidence rate, prognosis, and treatment options, including organ-sparing surgical techniques, for these rare tumors.

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KEY WORDS: Ovarian neoplasms; Classification; Incidence; Prognosis; Therapeutics.

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Pregnancy and malignant diseases — principles of management

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ABSTRACT

Pregnancy-associated malignant diseases introduce multiple dilemmas to the multidisciplinary boards, related to both the oncological treatment as well as to obstetrical management. The most frequent oncological diseases diagnosed during pregnancy are breast cancer, oncohematological conditions, uterine cervix cancer and skin cancers. There are different clinical scenarios: interruption of the pregnancy and further use of the most appropriate oncological strategy; it is also possible to postpone the oncological treatment for the postpartum period with a watch-and-wait strategy until the foetus is mature and the delivery is planned. The third scenario includes concurrent treatment of both conditions: use of chemotherapy, radiotherapy and surgery during an ongoing pregnancy. Choosing among these scenarios is considering many factors, including type and stage of the malignant tumour, pregnancy term, desire and informed decision of the pregnant woman to keep or interrupt the pregnancy. The current review is focused on the basic principles of the oncological modalities (surgery, chemotherapy and radiotherapy) during pregnancy as well as their influence over the pregnant woman and the foetus, over the obstetrical management and the timing and mode of delivery, delivery anaesthesia, lactation and breastfeeding from the point of view of the evidence-based medicine.

Key words: pregnancy, malignant diseases, radiotherapy, chemotherapy, surgery

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12. Kornovski Y, Ivanova Y, **Kostov S**, Slavchev S, Yordanov AD. Current state and new aspects of fertility preservation surgery in some oncogynaecological diseases. Medical

Current state and new aspects of fertility preservation surgery in some oncogynaecological diseases

Aktualny stan wiedzy i nowe doniesienia z zakresu chirurgii zachowującej płodność w wybranych schorzeniach onkoginekologicznych

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Key words: granulosa cell tumours, cervical cancer, epithelial borderline ovarian tumours, fertility preservation surgery.

Słowa kluczowe: guzy z komórek ziarnistych, rak szyjki macicy, nowotwory nabłonkowe jajnika o granicznej złośliwości, chirurgia zachowująca płodność.

Abstract

Preservation of reproductive function in young patients with uncompleted or unrealized reproductive plans in some malignant tumours of the female reproductive system has been a subject of study for many years, especially with the advances in assisted reproductive technologies. The main neoplasms that affect women in childbearing age are cervical cancer and ovarian tumours. In the current survey the novelties in the literature will be presented regarding the fertility preservation surgery in cervical cancer with size of tumour between 2 and 4 cm, granulosa cell ovarian tumours, and epithelial borderline ovarian tumours

13. Y Kornovski, Y Atanasova, **S Kostov**, S Slavchev, A Yordanov. Endometriosis and risk of ovarian cancer. *Oncol Clin Pract* DOI:10.5603/00.2021.0012 ; ISSN: 2450-1654;



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Endometriosis and risk of ovarian cancer

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ABSTRACT

Endometriosis is common in premenopausal women and affects about 10% of women of reproductive age. It is a benign condition but demonstrates malignant behaviour with recurrences and metastases. Its tendency to increase the risk of specific subtypes of ovarian cancer is being discussed, because they exhibit specific clinical features that distinguish them from classical ovarian cancer. Malignant transformation of endometriosis goes through its transition to atypical endometriosis. Although endometriosis-associated ovarian carcinomas have a good prognosis, adequate follow-up and monitoring after treatment of endometriosis are recommended.

Key words: endometriosis, ovarian cancer, endometriosis-associated ovarian carcinoma, rate, prognosis

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14. Y Kornovski, Y Atanasova, **S Kostov**, S Slavchev, A Yordanov. GYNAECOLOGICAL ONCOLOGIC DISEASES AND PREGNANCY. *Wiad Lek.* 2021;74(8):1984-1987 DOI:

REVIEW ARTICLE

GYNAECOLOGICAL ONCOLOGIC DISEASES AND PREGNANCY

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We review the current research literature on treatment behaviour for neoplasms of the female genital tract during pregnancy. Guidelines for clinical management of cervical cancer, ovarian tumours, and vulvar cancer are presented both regarding gynaecological oncologic treatment and obstetrics. Cervical cancer is the most common malignant tumour of the female genitalia during pregnancy due to the high incidence of this neoplasm in developing countries, including Bulgaria, on the one hand, and on the other, it affects women of reproductive age. Treatment algorithms depending on various factors – gestational age, stage of the disease, tumour lesion size, and presence of pelvic lymph node metastases, are presented. Ovarian tumours are classified into benign, borderline malignant, and malignant tumours. The latter, in turn, are divided into early and advanced stages, as well as epithelial and non-epithelial tumours, which can be detected at different stages of pregnancy.

KEY WORDS: pregnancy, malignancies of the female genitalia

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15. Strashilov SA, Nanev V, Slavchev S, Ivanova D, Kostov S, Yordanov A. Post-radiation soft tissue damage in endometrial carcinoma: a case report. *Prz Menopauzalny*. 2021 Apr;20(1):61-63. doi: 10.5114/pm.2021.104166. Epub 2021 Mar 5. PMID: 33935623; PMCID: PMC8077807..

Post-radiation soft tissue damage in endometrial carcinoma: a case report

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Abstract

Introduction: Radiotherapy (RT) is a widely used treatment modality of malignant tumours of the uterine cervix and body. There are different techniques to deliver RT to the tumour lesions, including external beam radiation and brachytherapy. All international guidelines recommend RT as treatment modality for many stages of uterine cervical and body cancers because it improves a number of oncological outcomes, such as disease-free and overall survival. However, it may also lead to a number of complications, which can be roughly divided into early or late, depending on the time of their manifestation. The most frequent RT-induced early complications involve the skin and the soft subcutaneous tissues. They typically present as inflammatory conditions of all abdominal wall layers: dermatitis, cellulitis, and necroses of subcutaneous fatty tissue, muscles, or fasciae.

Case report: This paper presents a case report of a 38-year-old woman diagnosed with endometrial cancer (EC). She was initially treated with open abdominal surgery, and subsequently the treatment was continued with external beam adjuvant RT.

Discussion: While RT was ongoing, a necrosis of the anterior abdominal wall in the surgical scar developed. It manifested at the end of the RT treatment and is thus regarded as an early complication of the RT for EC. It was successfully managed with surgery, and there was no compromise in the treatment of the oncological condition.

Conclusions: RT-induced necrosis of the surgical scar of the anterior abdominal wall is a very rare complication. Surgical treatment is the main method of treatment of this condition.

Key words: radiation therapy, radiation-induced complications, endometrial cancer.

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1. Я. Корновски, **С. Костов**, Й. Иванова, С. Славчев, А. Йорданов. *Оценка общия статус и селекция пациенти с авансирал овариален карцином за първична или интервална оптимална циторедукция*. Акушерство и гинекология. 2022, бр. 3, стр. 39-41; ISSN: 0324-0959

ОЦЕНКА НА ОБЩИЯ СТАТУС И СЕЛЕКЦИЯ ПАЦИЕНТИ С АВАНСИРАЛ ОВАРИАЛЕН КАРЦИНОМ ЗА ПЪРВИЧНА ИЛИ ИНТЕРВАЛНА ОПТИМАЛНА ЦИТОРЕДУКЦИЯ

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Резюме: Овариалният карцином е третото по честота онкогинекологично заболяване, както в световен мащаб, така и у нас. За съжаление заема първо място по смъртност, тъй като основно се диагностицира в III-IV стадии FIGO, т. нар. авансирал овариален карцином (АОК). Причината за това е интраперитонеалната дисеминация на туморните клетки и безсимптомното развитие на имплантационни метастази по перитонеалните повърхности в коремната кухина. В тези стадии основните лечебни опции са хирургия и платина-базирана химиотерапия. Хирургичното лечение се отъждествява с термина оптимална циторедукция т.е липса на макроскопски видим тумор. Това е най-важният прогностичен фактор при АОК. Оптималната циторедукция може да се извърши първично или след 3 курса химиотерапия-отложена или интервална циторедукция. Първичната оптимална циторедукция трябва да бъде основна цел на лечението при АОК, защото се асоциира с най-висока преживяемост. Три групи фактори определят възможността за извършване на първична или интервална хирургия: степен на туморно разпространение; хистологичен тип и биология (BRCA мутационен статус) на тумора и общо състояние и компенсаторни способности на пациента за посрещане на усложнения след тежки хирургични интервенции, каквито са циторедуктивните техники. В настоящата статия са очертани клиничните характеристики на пациентите, които не са подходящи за първична оптимална циторедукция, поради прекомерен риск от тежки усложнения и следоперативна смъртност.

Ключови думи: авансирал овариален карцином, първична оптимална циторедукция, интервална оптимална циторедукция, уязвимост на пациента, общо състояние на пациента

2. Я. Корновски, Й. Иванова, **С. Костов**. Епидемиология и превенция на HPV инфекция. Акушерство и гинекология. 2022, бр. 4, стр. 25-31; ISSN: 0324-0959

ОБЗОРИ

ЕПИДЕМИОЛОГИЯ И ПРЕВЕНЦИЯ НА HPV ИНФЕКЦИЯ

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Резюме: През 2008 г. Нобеловата награда за физиология и медицина бе присъдена на д-р Харалд цур Хаузен за ролята му в установяването на причинно-следствената връзка между инфекцията с човешки папиломен вирус (HPV) и карцинома на маточната шийка. Това съобщение отразява важността на откриването на полово предаваната инфекция като необходимата причина за рак на маточната шийка и огромната възможност за мероприятия и дейности за превенция в областта на общественото здраве. Откритието проправи пътя за профилактични ваксини, които предотвратяват инфекцията от HPV типове, които причиняват повечето случаи на рак на маточната шийка и доведе до разработването на HPV ДНК тестове, които са много по-чувствителни от традиционната цитология на Пап при откриване на високостепенни сквамозни и трапелителни лезии (HSIL).

Ключови думи: HPV ваксинация, скрининг за рак на маточната шийка, HPV скрининг

3. Я. Корновски, С. Костов, С. Славчев, Й. Иванова, А. Йорданов. *Тромбоемболични усложнения и онкогинекологична хирургия*. Акушерство и гинекология. 2022, бр. 2, стр. 35-37; ISSN: 0324-0959

ТРОМБОЕМБОЛИЧНИ ИНЦИДЕНТИ И ОНКОГИНЕКОЛОГИЧНА ХИРУРГИЯ

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Резюме: Пациентите с онкогинекологични диагнози, които подлежат на оперативно лечение са изложени на висок риск от тромбоемболични инциденти. Различни фактори увеличават коагулацията и тромбогенния риск. Като независими рискови фактори се сочат самото онкологично заболяване, хирургичната намеса, ползването на централен венозен път и провеждането на химиотерапия. Комбинацията от всичките тези фактори или някои от тях води до допълнително покачване на този риск. От съществено значение е предоперативният скрининг на пациенти с дълбока венозна тромбоза, която е основната причина за белодробен тромбоемболизъм, както и дългосрочното проследяване след операция и химиотерапия. В хода на това проследяване са възможни, както тромботични явления, които налагат съответна терапия, така и кръвоизливи, някои от тях животозастрашаващи. Липсват достатъчно проучвания в тази насока и стандартизирани модели на поведение и терапия, основани на доказателствената медицина при пациенти с различни локализации на неоплазми на женските гениталии. Предвид това е разгледан дизайнът на проспективно японско проучване, което може да послужи като модел за провеждане на други подобни изследвания.

4. Я. Корновски, Й. Иванова, С. Костов, С. Славчев, М. Маринов, А. Йорданов. *Ускорено възстановяване след оперативни интервенции- ERAS (Enhanced Recovery After Surgery)- философия, концепция и основни принципи на приложение в отворената гинекологична хирургия*. Анестезиология и интензивно лечение, 2021, бр. 1, стр. 10-13; ISSN: 1310-4284

УСКОРЕНО ВЪЗСТАНОВЯВАНЕ СЛЕД ОПЕРАТИВНИ ИНТЕРВЕНЦИИ- ERAS
(ENHANCED RECOVERY AFTER SURGERY) - ФИЛОСОФИЯ, КОНЦЕПЦИЯ
И ОСНОВНИ ПРИНЦИПИ НА ПРИЛОЖЕНИЕ
В ОТВОРЕНАТА ГИНЕКОЛОГИЧНА ХИРУРГИЯ

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ERAS (ENHANCED RECOVERY AFTER SURGERY)-PHILOSOPHY, CONCEPT
AND GENERAL PRINCIPLES OF IMPLEMENTATION IN OPEN GYNECOLOGIC
SURGERY

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Резюме:

Ускореното възстановяване след оперативни интервенции (ERAS-enhanced recovery after surgery) е система от мероприятия, които се прилагат основно периоперативно-непосредствено преди и по време на операция, както и в ранния следоперативен период. Прилагат се при отворени хирургични процедури в различни специалности, включително в гинекологията. Целта им е да се смекчи стреса от оперативната намеса върху функционирането на органите и системите и по този начин се постигне по-бързо възстановяване, с по-малко усложнения и да направи периоперативните резултати сравними с тези от минимално-инвазивните интервенсии. Въвеждането на ERAS протоколи в клиничната практика се налага в последните години в много центрове основно в САЩ, но и в Европа, поради прякото повлияване на болничния престой, цената на здравната услуга и ползите за пациента, неговите близки и лекуващия го персонал. В статията са представени елементите на протоколите ERAS приложими в оперативната гинекология, от гледна точка на доказателствената медицина, а също така и влиянието, резултатите и респективно ползите (първични, вторични и третични) от въвеждането на тези протоколи в ежедневната практика.

Ключови думи: ERAS, гинекология, основни принципи

Summary:

Enhanced recovery after surgery (ERAS) presents multimodal procedures that take place just before and during operative treatment, as well as during an early postoperative period. ERAS protocols are implemented in open surgery in several specialties including operative gynecology. The main goal of this system is to minimize the stress of operative trauma for all organs and systems and facilitate the recovery without complications and rehospitalizations. Thus, the perioperative outcomes would be comparable with these after minimal-invasive surgery. ERAS protocols are implemented in clinical practice last years in many centers, mainly in USA and Europe, because of short hospital stay, low price of health care and the benefits for patients, their families and the hospital staff. In this article are presented the elements of ERAS protocols in open operative gynecology in terms of evidence-based medicine and the impact of their implementation on clinical outcomes (primary, secondary and tertiary), as well.

Key words: ERAS, general principles, gynecology

5. С. Славчев, Я. Корновски, Й. Иванова, **С. Костов**, А. Йорданов. Мероприятия за бързо възстановяване след гинекологични операции в деня на оперативната намеса. *Акушерство и гинекология*, 2022, бр. 1, стр. 26-31; ISSN:0324-0959

МЕРОПРИЯТИЯ ЗА БЪРЗО ВЪЗСТАНОВЯВАНЕ СЛЕД ГИНЕКОЛОГИЧНИ ОПЕРАЦИИ В ДЕНЯ НА ОПЕРАТИВНАТА НАМЕСА

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Резюме:

Цел: Да се представи нашият опит в прилагането на мероприятия за бързо и ускорено възстановяване след гинекологични операции в деня на оперативната намеса.

Клиничен контингент: За периода 01.07.2020г-20.08.2021г. в проспективно проучване са включени 60 пациентки, от които: 54 подложени на отворена гинекологична операция и 6 на LAVH в клиника „Гинекология“ на МБАЛ „Св. Анна“ - Варна.

Методология: Мероприятията за бързо възстановяване след операция в деня на оперативната намеса разделяме на три етапа: преди пациента да влезе в операционната; по време на оперативната намеса; след оперативната намеса. Всяко мероприятие и резултатите от него се документират и одитират.

Резултати: ранно раздвижване и ранен перорален прием на 500-800 мл течности са постигнати при 98% от пациентите; стойности на кръвната захар под 11,1 mmol/l са установени при 91% от пациентите.

Заключение: Мероприятията за бързо и ускорено възстановяване в деня на оперативната интервенция са приложими след одит и контрол. Тези мероприятия са доказали своята ефективност и са насочени към следните фактори, отговорни за ускореното следоперативно възстановяване: Еуволемия: постига се чрез избягване на механичната подготовка на червата и целева инфузионна терапия по време и след операцията; свързва се с подобрена чревна функция, липса на гадене и повръщане и профилактика на чревната непроходимост; Обезболяване без опиоиди (липса на гадене и болка; избягва се чревната пареза); Ранно раздвижване - води до бързо възстановяване на чревната функция; Ранно хранене (прием на течности 500-800 мл) – води до бързо възстановяване на чревната функция и е фактор в постигането на еуволемия; Профилактика на раневите инфекции (АБ профилактика; нормогликемия; прием на течности, богати на въглехидрати преди операция); Избягване на кръвозагубата и катаболните процеси по време на операция (нормотермия в операционната зала; перорален прием на течности до 200 мл, богати на въглехидрати преди операция).

Ключови думи: еуволемия, ранно раздвижване, ранен перорален прием на течности, следоперативна хипергликемия

6. Й. Иванова, Я. Корновски, С. Костов, С. Славчев А. Йорданов. Приложимост на интаруретралния неаблативен Erbium-Yag лазер в лечението на уринарната компонента на генитоуринарния синдром в менопаузата. Акушерство и гинекология. 2022, бр. 2, стр. 14-17; ISSN: 0324-0959

ПРИЛОЖИМОСТ НА ИНТРАУРЕТРАЛНИЯ НЕАБЛАТИВЕН ERBIUM-YAG ЛАЗЕР В ЛЕЧЕНИЕТО НА УРИНАРНАТА КОМПОНЕНТА НА ГЕНИТОУРИНАРНИЯ СИНДРОМ В МЕНОПАУЗАТА

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Резюме: Генитоуринарният синдром в менопаузата е съвкупност от симптоми, които се развиват след и около менопауза, вследствие ниски нива на естрогените и хипо- и атрофични изменения в генитоуринарния тракт на жените. Освен вагиналната сухота и диспареуния се срещат различни по честота уринарни оплаквания, като дизурия, полакиурия, никтоурия, императивна инконтиненция, свръхактивен пикочен мехур, чести уроинфекции. Те водят до ниско самочувствие и влошено качество на живот. Използването на локални естрогени за купиране на тези симптоми е противоречива тема, поради онкогенен и тромбогенен риск. Лазерните терапии са терапевтична опция с добър профил на безопасност и ефективност. Въвеждането в практиката на интрауретралния апликатор на неаблативния ербий лазер на Fotona откри нови възможности за повлияване на уринарните симптоми на жени в менопауза. Статията представя терапевтичните резултати и опита с интрауретрален апликатор на Er:YAG лазера в лечението на уринарна компонента на генитоуринарния синдром в менопаузата в един център за извънболнична помощ.

Ключови думи: ербий лазер, интрауретрален апликатор, уринарна компонента на генитоуринарния синдром в менопауза

7. Я. Корновски, Й. Иванова, С. Костов, С. Славчев, А. Йорданов. *Диагностично-лечебен алгоритъм при жени с уринарна инконтиненция в амбулаторната практика.* Акушерство и гинекология. 2021, бр. 4, стр. 43-46; ISSN: 0324-0959

ЗА ПРАКТИКАТА

ДИАГНОСТИЧНО-ЛЕЧЕБЕН АЛГОРИТЪМ ПРИ ЖЕНИ С УРИНАРНА ИНКОНТИНЕНЦИЯ В АМБУЛАТОРНАТА ПРАКТИКА

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Резюме: Инконтиненцията на урина е проблем, който засяга голяма част от жените, особено с напредване на възрастта. Сложната етиопатогенеза на тази патология предполага разнообразие от видове, форми и разновидности. Диагнозата и разграничаването помежду им е в основата на избор на лечебен метод. Съществува широк спектър от методи на лечение, някои от които са минимално-инвазивни или неоперативни. Прилагането им в амбулаторни условия ги прави приемливи за пациентите, поради липсата на болничен престой и риска от вътреболнични инфекции, липсата на следоперативно възстановяване и болка, както и запазената работоспособност. Представяме диагностично-лечебен алгоритъм приложим в амбулаторната практика

Ключови думи: амбулаторна практика, диагностично-лечебен алгоритъм, уринарна инконтиненция

8. Я. Корновски, Ст. Костов, Ст. Славчев, Й. Иванова, С. Стоилов. Карцином на вулвата – II стадий по FIGO – широка локална ексцизия, резекция на уретра и възстановяване на дефекта – наша модификация. Акушерство и гинекология, 2021, бр. 2, стр. 51-55; ISSN: 0324-0959

КАРЦИНОМ НА ВУЛВАТА – II СТАДИЙ ПО FIGO - ШИРОКА ЛОКАЛНА ЕКСЦИЗИЯ, РЕЗЕКЦИЯ НА УРЕТРА И ВЪЗСТАНОВЯВАНЕ НА ДЕФЕКТА - НАША МОДИФИКАЦИЯ

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Резюме:

Представен е случай на локално авансирал рак на вулвата при 73 годишна жена. Илюстрирани са основни моменти от радикалността на хирургичната намеса, включително резекция на дисталната уретра. Първичното и неусложнено зарастване на раната след такава операция зависи от два фактора: шевове между влагалище и кожа да са без напрежение (*tension-free*) и да се избегне контаминация от урина или фекалии, както и от вторична бактериална флора, развиваща се в условия на атрофичен вулвовагинит и нарушена киселинност на влагалището. С цел по-бързо и неусложнено зарастване на раната е представена наша модификация с използване на кожа, при което кожно-влагалищните шевове се затягат без напрежение. Резекцията на дисталната уретра се налага, за да се осигури радикалност на процедурата и не се свързва с възникване на уринна инконтиненция.

Ключови думи: рак на вулвата, резекция на уретра, широка локална ексцизия

9. Й. Иванова, Я. Корновски, С. Костов, С. Славчев, А. Йорданов. Неоперативно лечение на жени с уринарна инконтиненция чрез неаблативен Erbium-Yag (Fotona) лазер. Акушерство и гинекология. 2021, бр. 4, стр. 15-19; ISSN: 0324-0959

НЕОПЕРАТИВНО ЛЕЧЕНИЕ НА ЖЕНИ С УРИНАРНА ИНКОНТИНЕНЦИЯ ЧРЕЗ НЕАБЛАТИВЕН ERBIUM-YAG (FOTONA) ЛАЗЕР

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Резюме: Уринарната инконтиненция при жените е често срещан симптом, особено след вагинално раждане, като и след менопауза. Този проблем намалява качеството на живот и влияе на самочувствието на пациентите. Недокладването на проблема, поради неудобство, чувство за нелечимост или приемането му за естествен физиологичен процес, го прави недостатъчно диагностициран и адекватно лекуван. Методите за лечение на уринарната инконтиненция са хирургични и нехирургични (неинвазивни), като последните се предпочитат от пациентите. Един от консервативните методи на лечение, който се налага в последните години е лазерната терапия с различни видове лазери. Статията представя терапевтичните резултати и опита с Er:YAG лазер при лечението на уринарна инконтиненция при жените в един център за извънболнична помощ.

Ключови думи: уринарна инконтиненция, Er:YAG лазер, неоперативно лечение

10. С. Славчев, Я. Корновски, Й. Иванова, **С. Костов**, А. Йорданов. Неопиоидна (opioid-sparing analgesia) аналгезия след гинекологични операции в ранния следоперативен период. Акушерство и гинекология. 2022, бр. 1, стр. 22-25; ISSN: 0324-0959

НЕОПИОИДНА (OPIOID-SPARING ANALGESIA) АНАЛГЕЗИЯ СЛЕД ГИНЕКОЛОГИЧНИ ОПЕРАЦИИ В РАННИЯ СЛЕДОПЕРАТИВЕН ПЕРИОД

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Резюме:

Цел: Да се представи приложимостта и ефективността на опиоидно спестяващата аналгезия, като един от елементите на ERAS, в ранния следоперативен период след гинекологични операции. **Клиничен контингент:** За периода 01.07.2020г. - 20.08.2021г. в проспективно проучване са включени 60 пациентки, оперирани планоно, от които: 54 подложени на отворена гинекологична операция и 6 на LAVH в клиника „Гинекология“ на МБАЛ „Св. Анна“ - Варна.

Материал и Методи: Описана е подробно методиката на инфилтрационна анестезия с Virivacain в оперативния разрез и синергичното обезболяващо действие на следоперативното обезболяване с аналгетици (ацетаминофен) и НПВС в ранния следоперативен период.

Резултати: Липса на болка или слаба болка по визуално-аналоговата скала е отчетена при 89% , а липса на гадене и повръщан е- при 85% от оперираните пациенти.

Заключение: Опиоидно спестяващата аналгезия (opioid sparing analgesia) е приложима в ежедневната практика след гинекологични отворени операции по повод онкологични и неонкологични операции. Опиоидно спестяващата аналгезия осигурява отлично обезболяване непосредствено след отворена гинекологична операция и е предпоставка за бързо раздвижване и съответно ускорено следоперативно възстановяване.

Ключови думи: следоперативно обезболяване, опиоидно спестяваща аналгезия, инфилтрационна анестезия в оперативния разрез

Дата: 07.06.2024 г.

Изготвил:

д-р Стоян Костов, д.м.