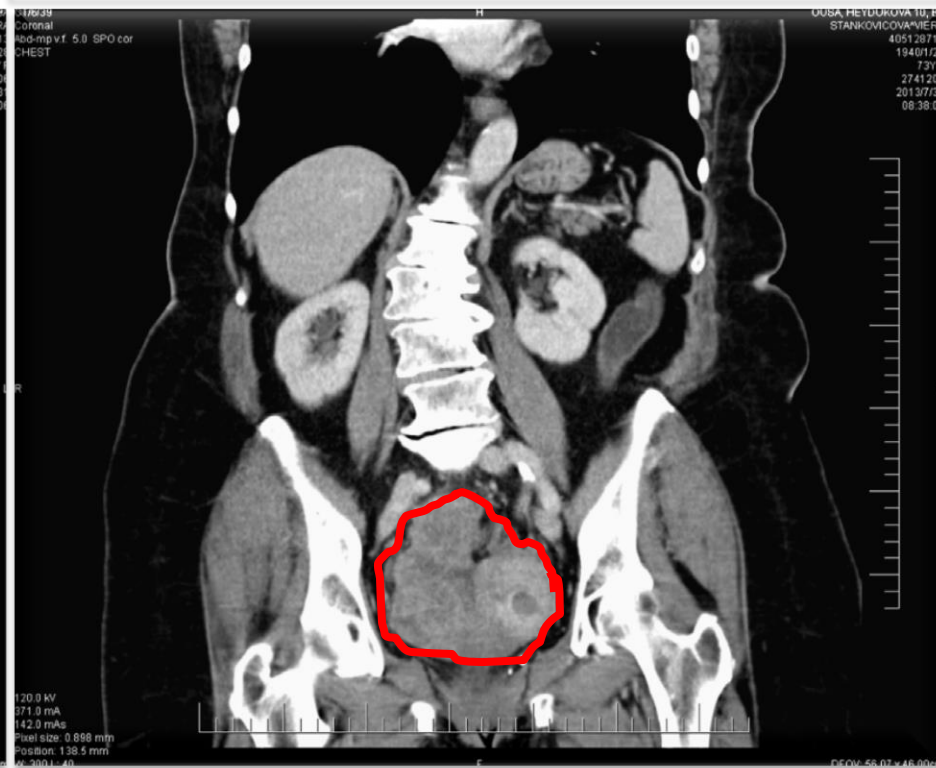


Anamnéza

- 73- ročná žena s nádorom pravých adnex
- k POB aj s údajom o karcinóme prsníka (ante annos)

CT vyšetrenie

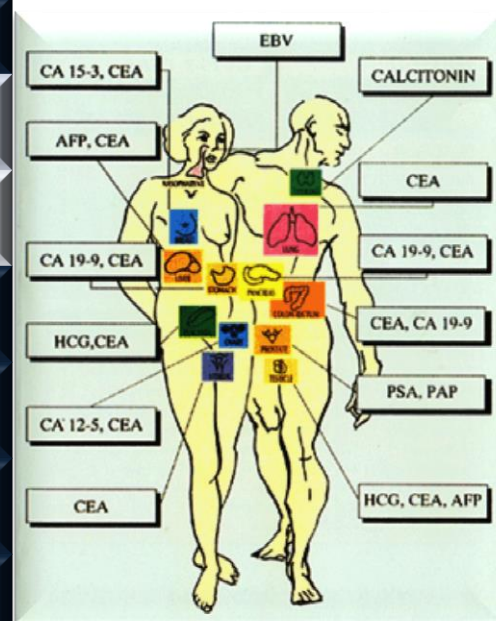
- * solídna TU expanzia s cystoidnou zložkou laločnatých kontúr pôvodom v.s. z oblasti pr. adnex, obrastajúca a doľava dislokujúca uterus, veľk. 12 x 8.5 x 9.5 cm (APxLLxCC)
- * v ľ.lat.stene uteru hypodenzné ložisko priem. 15 mm (najsôr myóm), zo zadnej steny doprava do CD prominuje stopkatý, kompletne kalcifikovaný uzol priem. 62 mm (v.s. myóm)
- * Ľavé ovárium bez evidentných expanzií





Tumor - markery

TUMOR MARKER	25.07.2013	Norma
CEA	0,3	4,0
CA19-9	5,8	30,0
CA125	785,4	30,0
HE4	191,7	150
ROMA –PRE	71,6	<12,9
ROMA - POST	90,5	<24,7





Operačné riešenie

- Abdominálna hysterektómia, adnexektómia bilat., exstirpácia tu pelvis minoris l.dx., omentectomy totalis
- OP: z pravých adnex vychádza **laločnatá tumorózna formácia veľkosti cca 20x15 cm, s porušeným puzdrom, fixovaný do panvy vpravo**
- na slezine **implantačné ložisko parahilózne cca 1x1 cm**, LU paraaortálne ani pelvické nezväčšené, stopový ascites



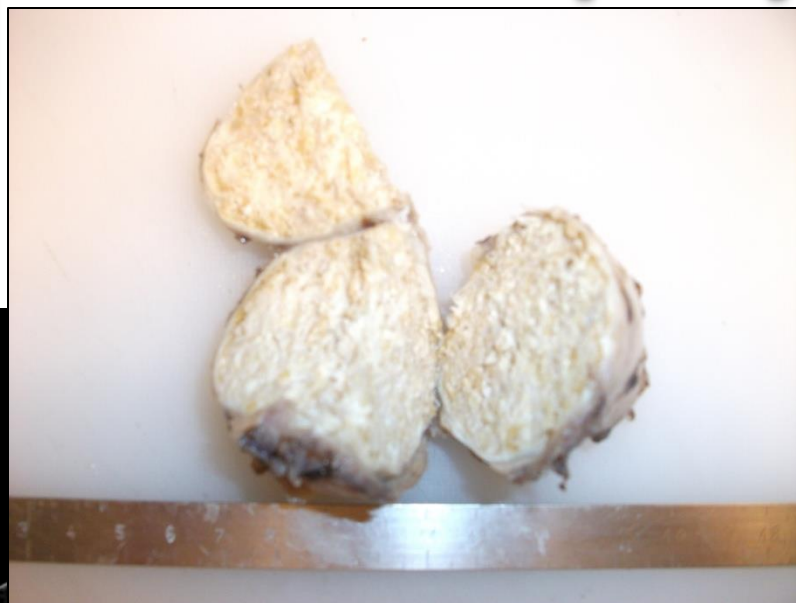


Makroskopický nález





Makroskopický nálež



Ostatný CT nálež

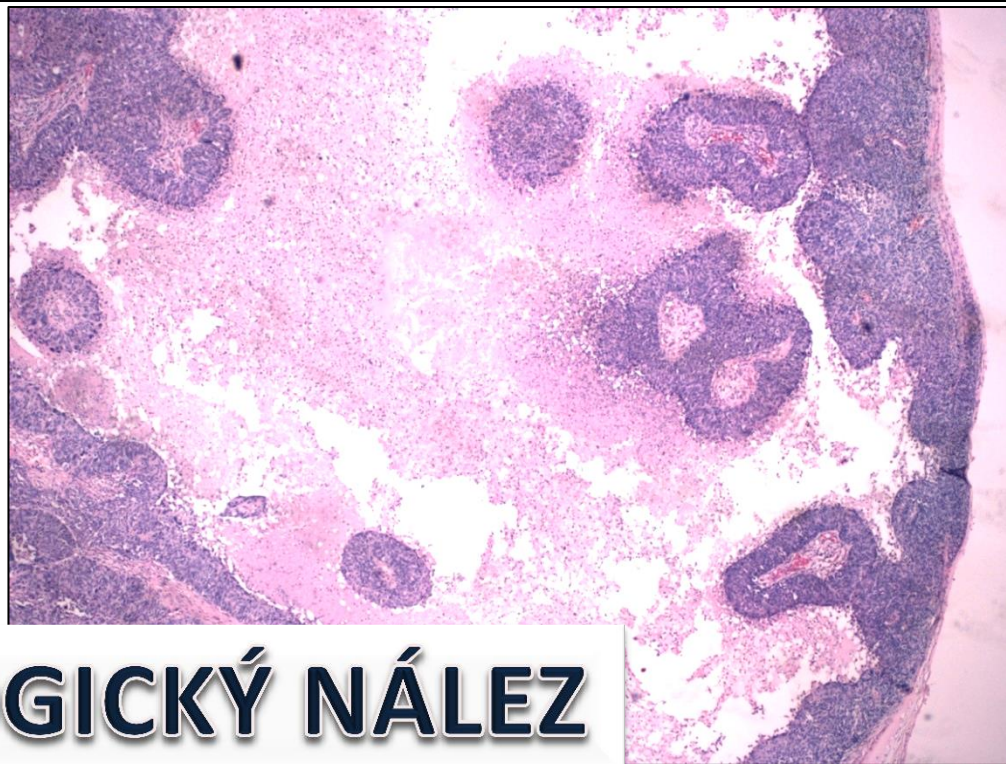
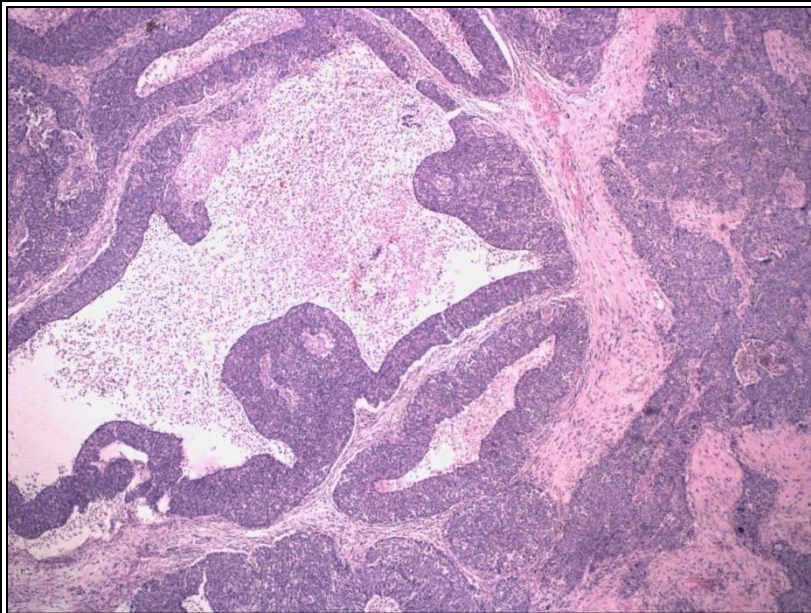
- v ľavom peritoneu sú **solídne nodulárne lézie** (implant. MTS?)
- sigma tlakom uteru a TU zúžená, no nezdá sa priamo infiltrovaná
- * panvový segment pr. ureteru je komprimovaný adnex. TU, čo je príčinou miernej akcentácie horných odv. moč. ciest
- * intrapelvicky bez LAP

CT 1/5/2019
Axial
Abd-mp v.f. 1.5 B20r
CHEST

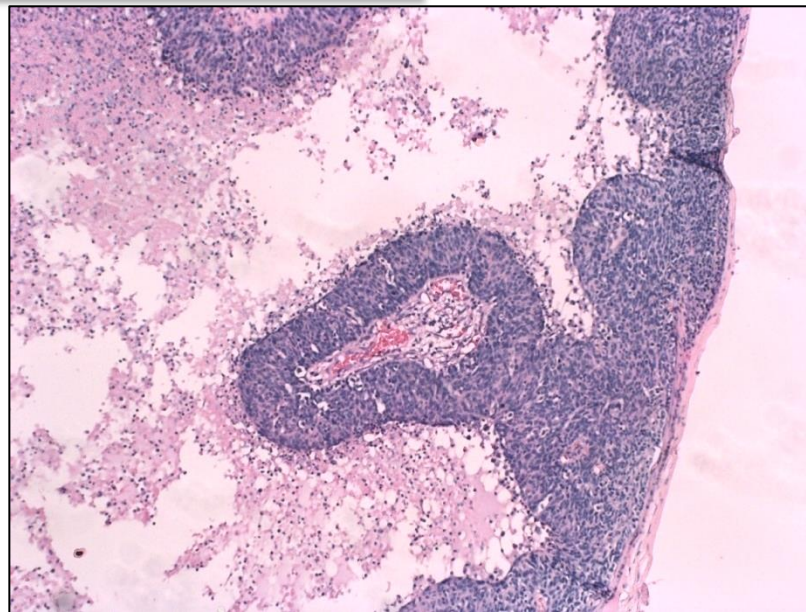
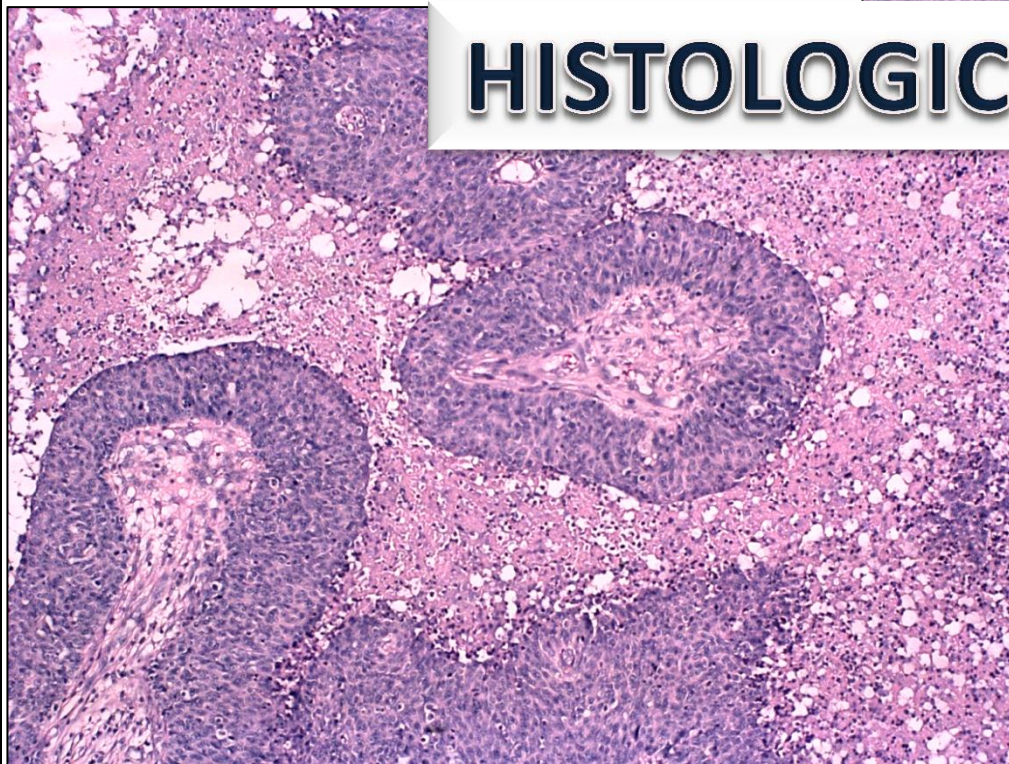


120.0 kV
384.0 mA
147.0 mAs
Pixel size: 0.887 mm
Position: -600.0 mm
kV 2001 - 40

DEFOV 55.3 / 15.40 mm



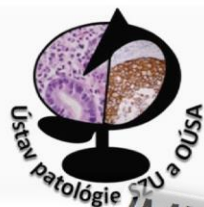
HISTOLOGICKÝ NÁLEZ



Otázky a odpověde

1. primárny verzus sekundárny?





primárny verzus sekundárny tumor?

Náš prípad:

- 08.1984 – DIC, ME+EA+RTh
- komedonové nekrózy
- IHC:

CK7+/ER+/PR+/WT1+/MG-

IMMUNOHISTOCHEMISTRY
GYNAECOLOGICAL
PATHOLOGY- PART 1

Glenn McCluggage, Belfast

OVARY VERSUS BREAST

- association between breast and ovarian carcinoma (BRCA1/2)
- usually breast cancer develops first
- most patients with history of breast carcinoma who have pelvic mass will have new ovarian primary, almost always type
- if poorly differentiated, morphological overlap between metastatic breast and carcinoma
- can get micropapillary variant of breast carcinoma
- core biopsy often performed

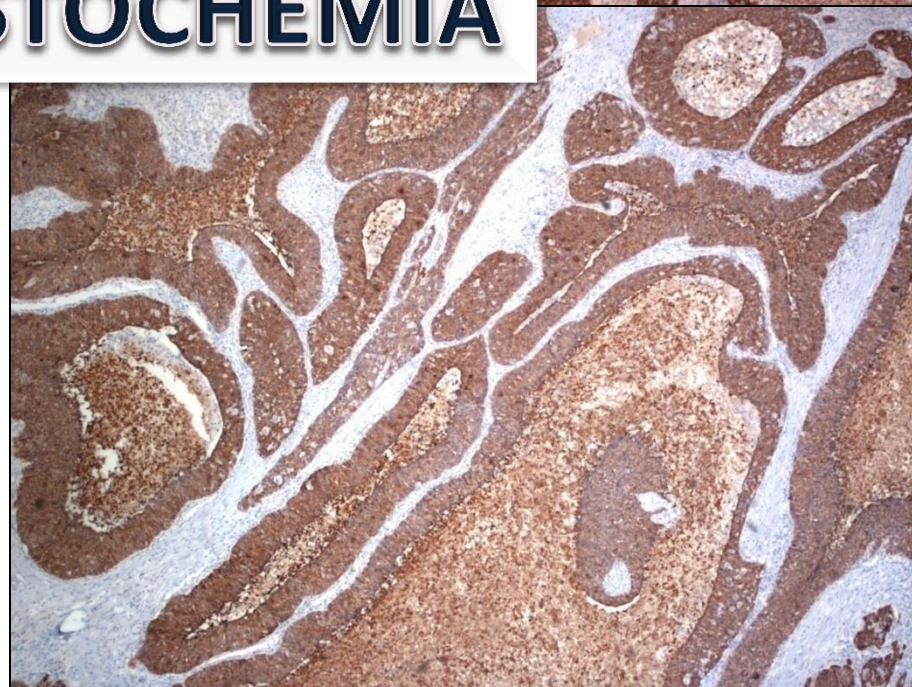
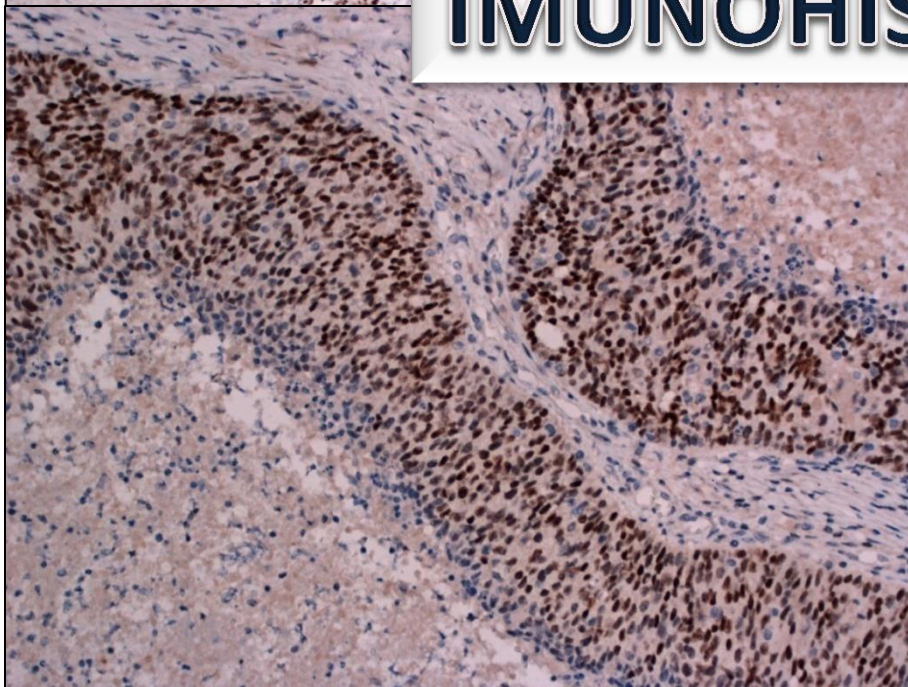
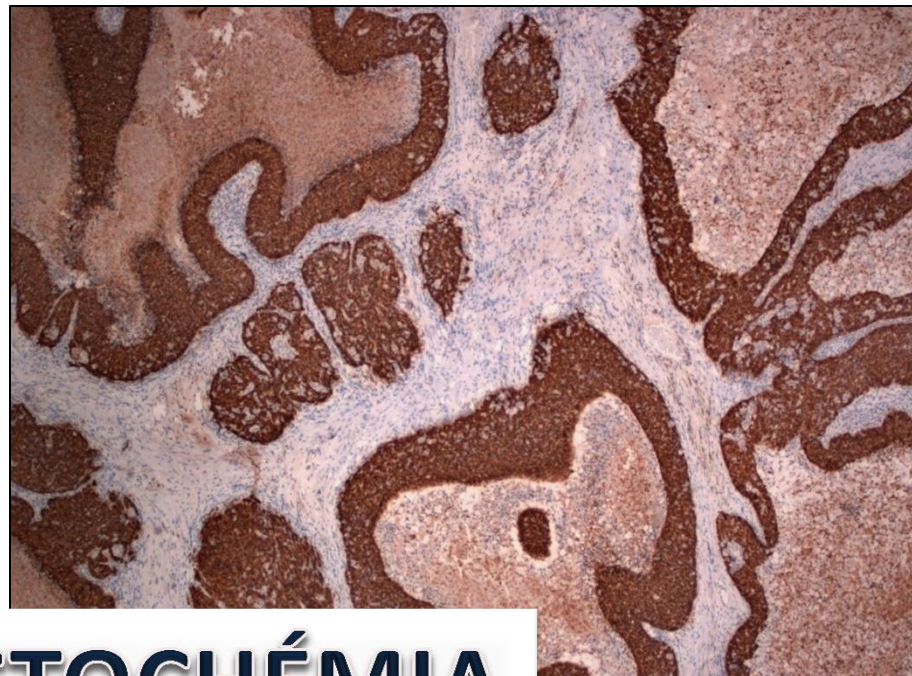
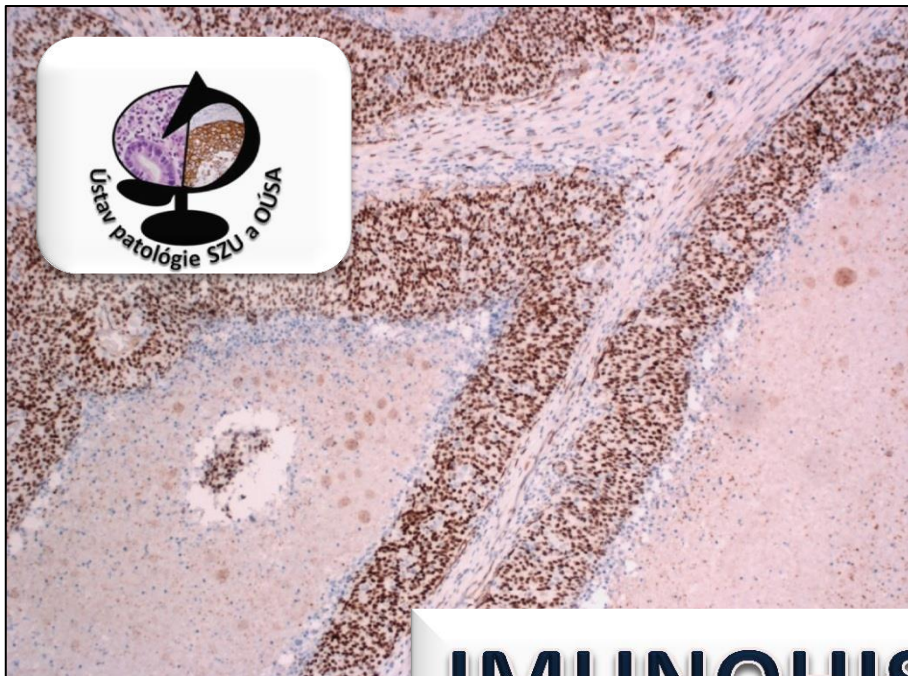
USEFUL MARKERS

- ovarian
 • WT1, CA125, PAX 8
 (useful new marker of non-mucinous ovarian carcinomas), PAX2
- breast- GCDP15 (more specific/less sensitive), mammoglobin (more sensitive/less specific)

SOME OVERLAP AS ALWAYS BUT
USEFUL PANEL



IMUNOHISTOCHÉMIA



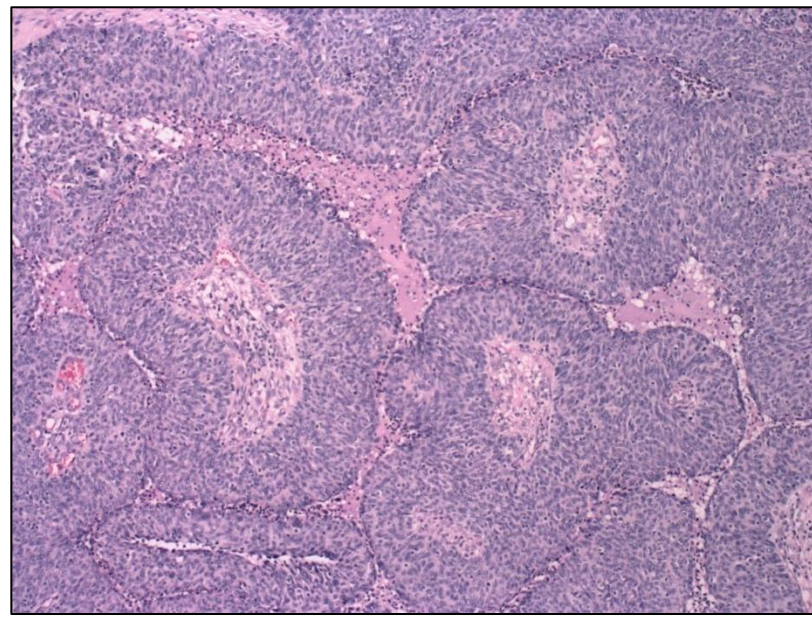
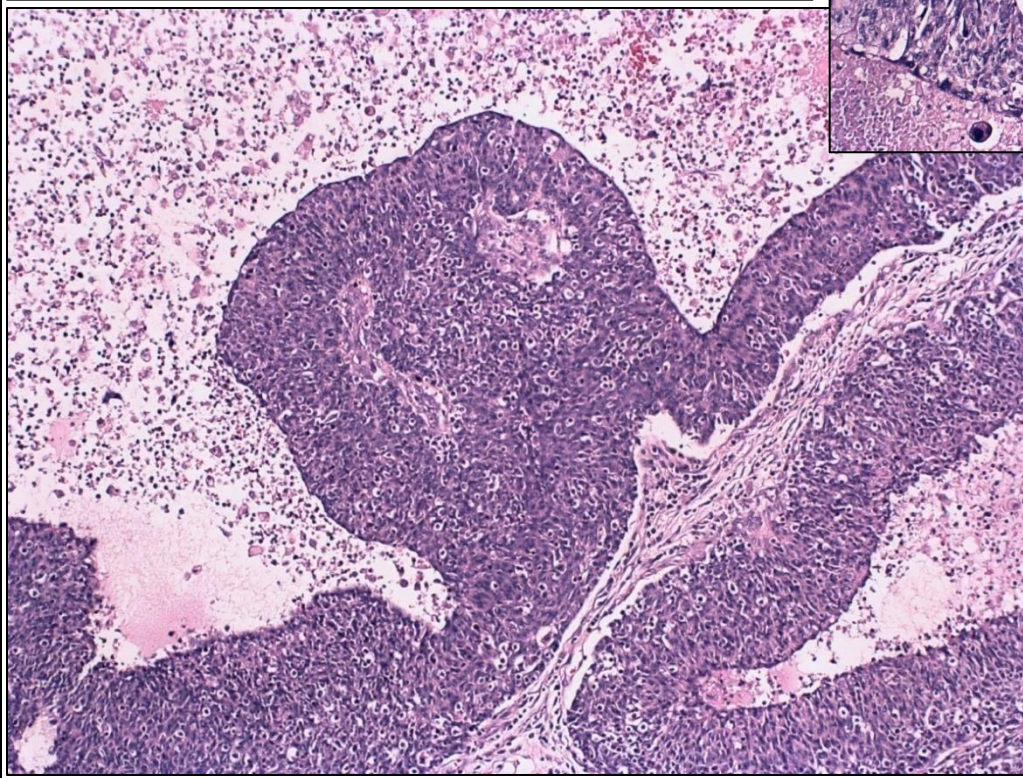
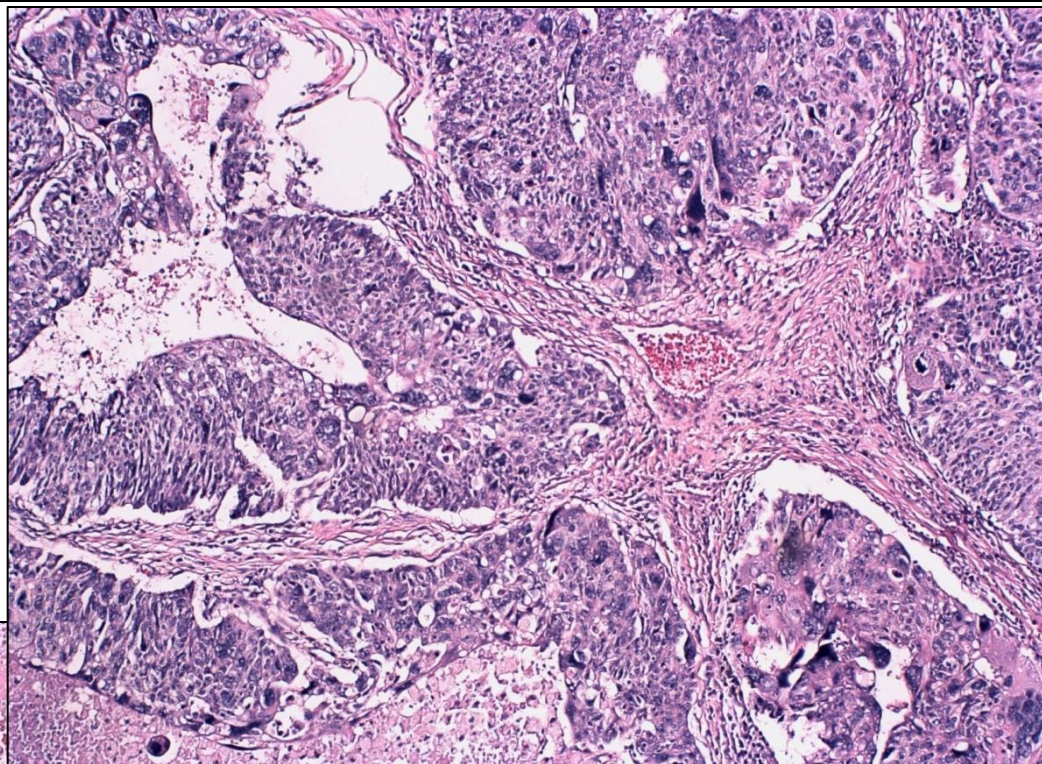
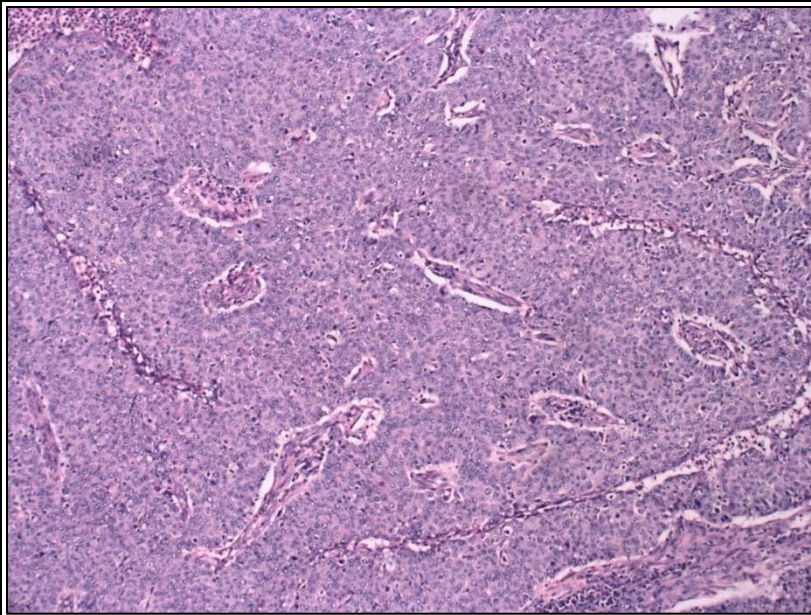
Otázky a odpovede

1. primárny verzus sekundárny?

primárny karcinóm ovaria

2. ak primárny, tak aký?





Otázky a odpovede

1. primárny verzus sekundárny?

primárny karcinóm ovaria

2. ak primárny, tak aký?

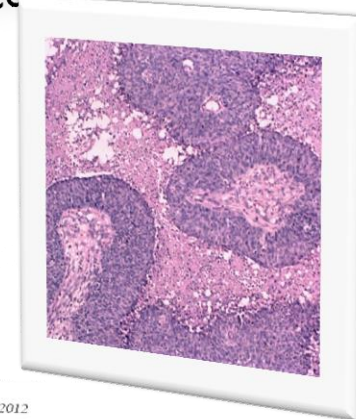
transitional cell karcinóm



Transitional cell carcinoma



- relatívne nedávno opísaný a zriedkavý variant (Austin a Norris, 1987) – **primárny ovariálny karcinóm s určitými urotelovými črtami bez benígneho, metaplastického a / alebo proliferujúceho Brennerovho nádoru**
- incidencia **1-2%** všetkých ovariálnych Ca
- limitované poznatky o morfológii – **hrubé papily** (MTS TCC má pseudo-papily)
- **Mulleriánska** a nie urotelová diferenciácia
- v čistej alebo zmiešanej forme



ONCOLOGY LETTERS 3: 3-6, 2012

Transitional cell carcinoma of the ovary (Review)

SATOSHI ICHIGO¹, HIROSHI TAKAGI¹, KAZUTOSHI MATSUNAMI¹,
TAKAYUKI MURASE², TSUNEO IKEDA² and ATSUSHI IMAI¹

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DOI: 10.3892/ol.2011.453



CASE REPORT

Open Access

Transitional cell carcinoma of the ovary: A rare case and review of literature

EM Tazi^{1*}, I Lalya¹, MF Tazi², Y Ahellal², H M'rabti¹, H Errihani¹

Available online at www.sciencedirect.com

SciVerse ScienceDirect

Journal of the Chinese Medical Association 74 (2011) 478–479



www.jcma-online.com



Letter to the Editor

Transitional cell carcinoma of the ovary

Romanian Journal of Morphology and Embryology 2008, **49**(4):513–516

ORIGINAL PAPER

Transitional cell tumors of the ovary: a compact group with a heterogeneous histological and immunophenotypical pattern

M. CEAUȘU^{1,2)}, DANA TERZEA^{1,2)}, ALINA GEORGESCU¹⁾,
CAMELIA DOBREA¹⁾, MIHAELA MIHAI¹⁾, CRISTINA IOSIF¹⁾,
FLORINA VASILESCU¹⁾, CARMEN ARDELEANU^{1,2)}

¹⁾Department of Pathology,

"Victor Babes" National Institute for Research and Development
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²⁾"Carol Davila" University of Medicine and Pharmacy, Bucharest

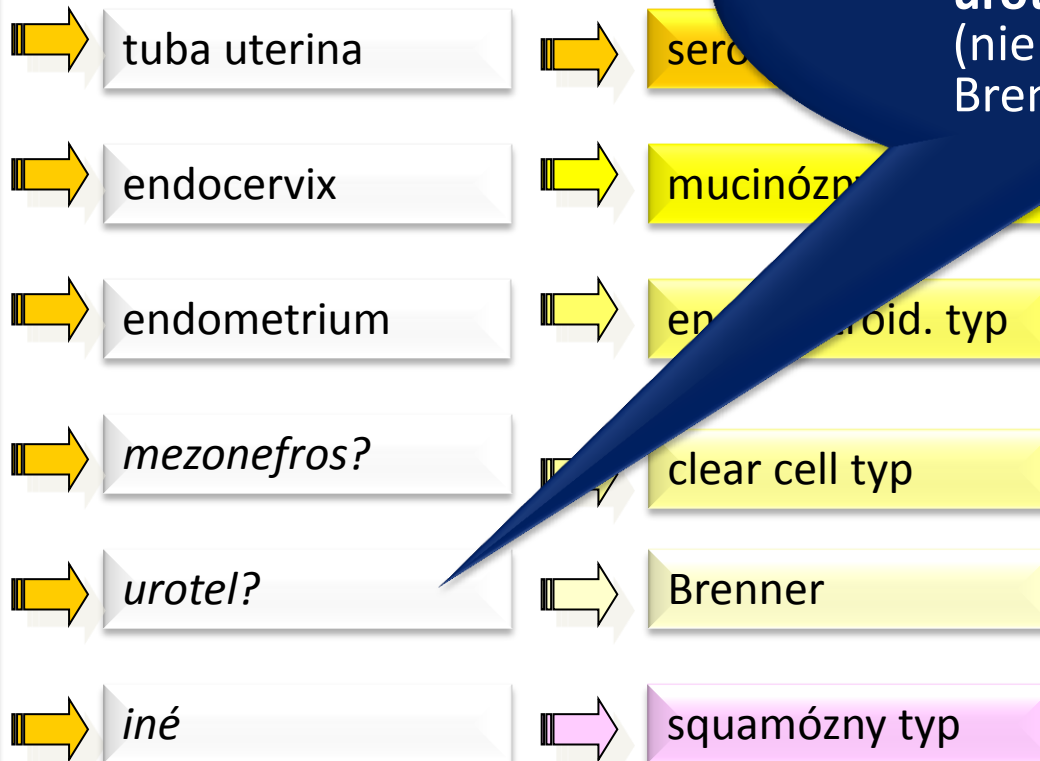
1. Model [ovariálny povrchový epitel a kortikálne inklúzne cysty]

EPITELOVO-STROMÁLNE NÁDORY

ovariálny povrchový epitel (OSE)

sekundárny Mülleriansky systém

D
I
F
F
E
R
E
N
C
I
Á
C
I
A



Austin a Norris (1987) –
**pluripotentný povrchový
epitel ovaria s bunkami s
uroteliálnym potenciálom**
(nie z prekursorov
Brennerovho nádoru)

- benígne
- borderline
- malígne

Nádory ovaria – klasifikácia WHO 2003

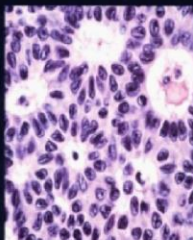
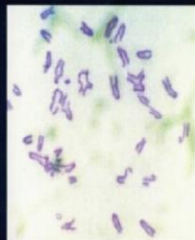
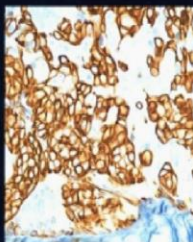
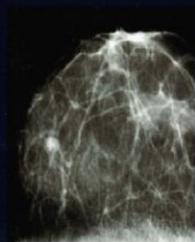
World Health Organization Classification of Tumours



Pathology & Genetics

Tumours of the Breast and Female Genital Organs

Edited by Fattaneh A. Tavassoli & Peter Devilee



Transitional cell tumours

Malignant

Transitional cell carcinoma (non-Brenner type) 8120/3

Malignant Brenner tumour 9000/3

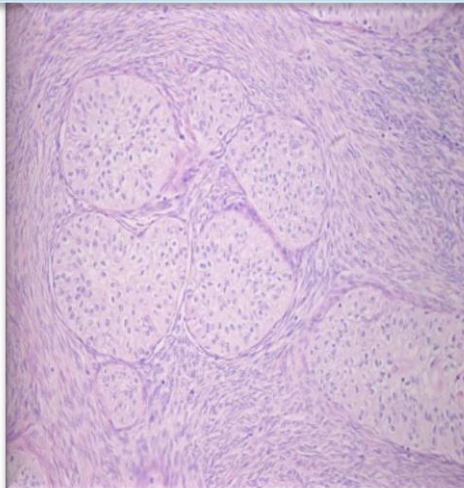
Borderline

Borderline Brenner tumour 9000/1

Proliferating variant 9000/1

Benign

Brenner tumour 9000/0



Serous tumors

Serous cystadenoma, adenofibroma

Serous tumor of borderline malignancy (of low malignant potential)

Serous adenocarcinoma

Mucinous tumors, endocervical-like and intestinal types

Mucinous cystadenoma

Mucinous tumor of borderline malignancy (of low malignant potential)

Transitional cell tumors

Brenner tumor

Brenner tumor of borderline malignancy (proliferating)

Malignant Brenner tumor

Transitional cell carcinoma (TCC) (non-Brenner type)

Squamous cell tumors

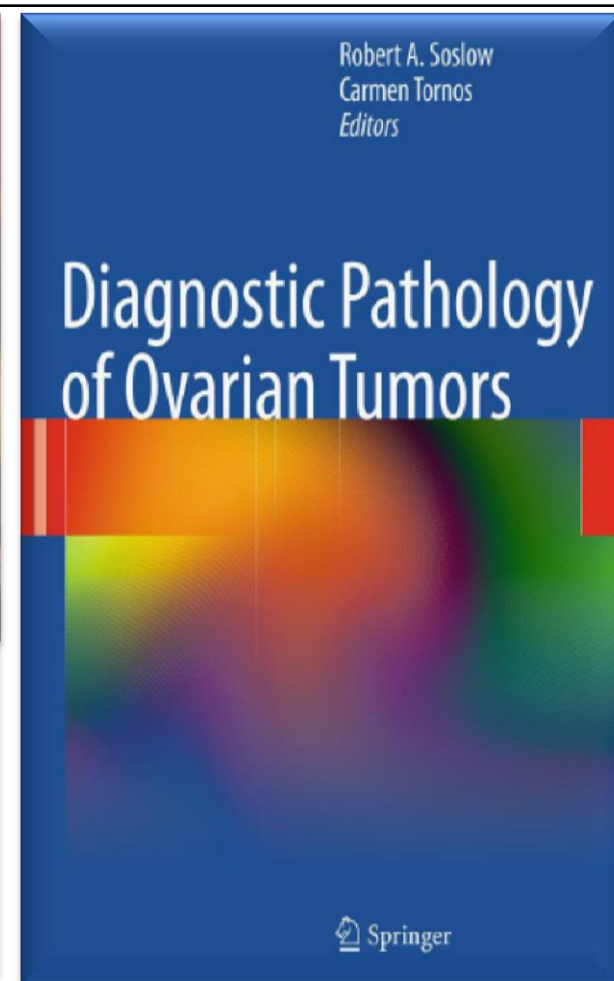
Mixed epithelial tumors (specify components)

Benign

Of borderline malignancy (of low malignant potential)

Malignant

Undifferentiated carcinoma



Robert A. Soslow
Carmen Tornos
Editors

Diagnostic Pathology of Ovarian Tumors

 Springer

Table 10.1 Key features of transitional cell (Brenner) neoplasms

	Benign Brenner component	Disorderly Brenner nests	Cytologic atypia	Stromal invasion	Papillary growth	Extraovarian involvement
Benign Brenner tumor	Present	Often focally present	None	Absent	Absent	Absent
Atypical proliferative (borderline) Brenner tumor	Present	May be present	Present, variable degree	Absent	Usually present	Absent
Malignant Brenner tumor	Present	Often present	Variable, may be severe	Present	May be present	May be present (36%)
Transitional cell carcinoma	Absent	Absent	Severe	Present	Present	Usually present

Transitional cell carcinoma of the ovary is related to high-grade serous carcinoma and is distinct from malignant brenner tumor.

Ali RH, et al., Int J Gynecol Pathol 2012 Nov;31(6):499-506

- IHC porovnanie BT a TCC
- 7 TCCs IHC - WT1, ER, p53, a p16(INK4a)
- **BTs boli negatívne WT1, p53, ER (výnimka slabšej expresie v 1 prípade), a p16(INK4a)-/+**
- TCCs boli: 4/6 + WT1, 5/7 + ER, 2/7 + p16(INK4a), a 6/7 + p53 = ako HG-SC

Záver:

- **BT a TCC nie sú príbuzné a nemali by byť v jednej klasifikačnej skupine**

Podobný záver aj Riedel et al, Virchow Arch 2001; 438:181-191:

- TCC spĺňajú kritéria zle diferencovaných ovariálnych adenokarcinómov Mullerianského typu (CK20-/CK13-CA125+) a pravou uroteliálnou ovariálnou neoplazmou je BT.



CASE REPORT

Open Access

Transitional cell carcinoma of the ovary: A rare case and review of literature

EM Tazi^{1*}, I Lalya¹, MF Tazi², Y Ahellal², H M'rabti¹, H Errihani¹

Prognosis

The relative influences of tumor biology and treatment strategies remain undetermined. Gershenson et al. concluded that advanced-stage ovarian TCC was significantly more chemosensitive and associated with better prognosis than poorly differentiated serous carcinoma [9]. Kommoss et al also documented that patients with TCC had better prognoses compared to patients with all other types of ovarian carcinomas after standardized chemotherapy[10].

- **Chemosenzitívny tumor s lepšou prognózou ako zle diferencovaný SC** (Gershenson et al, 1993; 1995)
- Lepšia prognóza ako ostatné typy CaO po liečbe (Kommos et al, 2005)

Otázky a odpovede

1. primárny verzus sekundárny?

primárny karcinóm ovaria

2. ak primárny, tak aký?

transitional cell karcinóm

3. primárny verzus sekundárny?



Immunoprofile of ovarian tumors with putative transitional cell (urothelial) differentiation using novel urothelial markers: histogenetic and diagnostic implications.

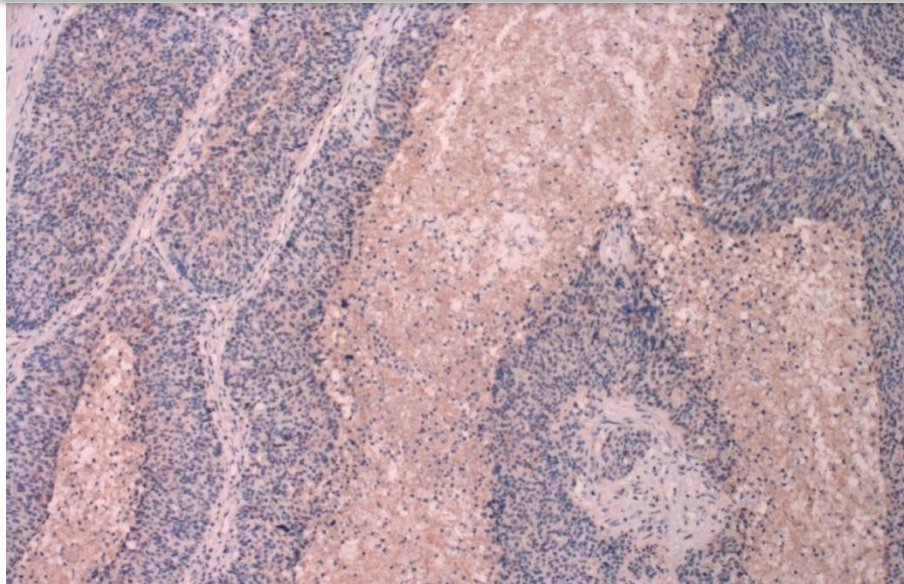
Logani S, et al, Am J Surg Pathol. 2003 Nov;27(11):1434-41

- IHC porovnanie TCC-O s TCC-B a odlíšenie od MTS TC
- 17 ben. BT a 17 TCC-O bolo analyzovaných pomocou UROIII, THR, CK7, CK20, WT1
- 6 BT s borderline malignitou analyzovaných UROIII, THR, CK7, a CK20.
- IHC komparácia s 30 prípadmi noninvazívneho TCC-B a 36 prípadmi invazívneho TCC-B
- väčšina BT bola pozitívna pri dôkaze UROIII (82%) a THR (76%) – ide o pravú urotelovú diferenciáciu
- TCC-O je morfol.podobný TCC-B, ale len parciálne sa IHC prekrývajú
- TCC-O zriedka exprimujú UROIII (6%) a THR (18%) a žiadny nie je pozitívny pri dôkaze CK20
- takmer 40% inv. TCC-B bolo pozitívnych pri dôkaze UROIII, 61% THR, a 50% CK20.
- takmer **82% TCC-O exprimovalo WT1**, ktorý bol negatívny vo všetkých TCC-B
- rozlíšenie TCC-O (CK20-, UROIII-/+, WT1+) a inv. TCC-B (CK20+, UROIII+/-, WT1-) metastázujúcich do ovaria
- **morfológická podobnosť medzi TCC-O a TCC-B nepoukazuje na histogenetickú podobnosť – TCC-O predstavuje variant povrchových ovariálnych karcinómov**

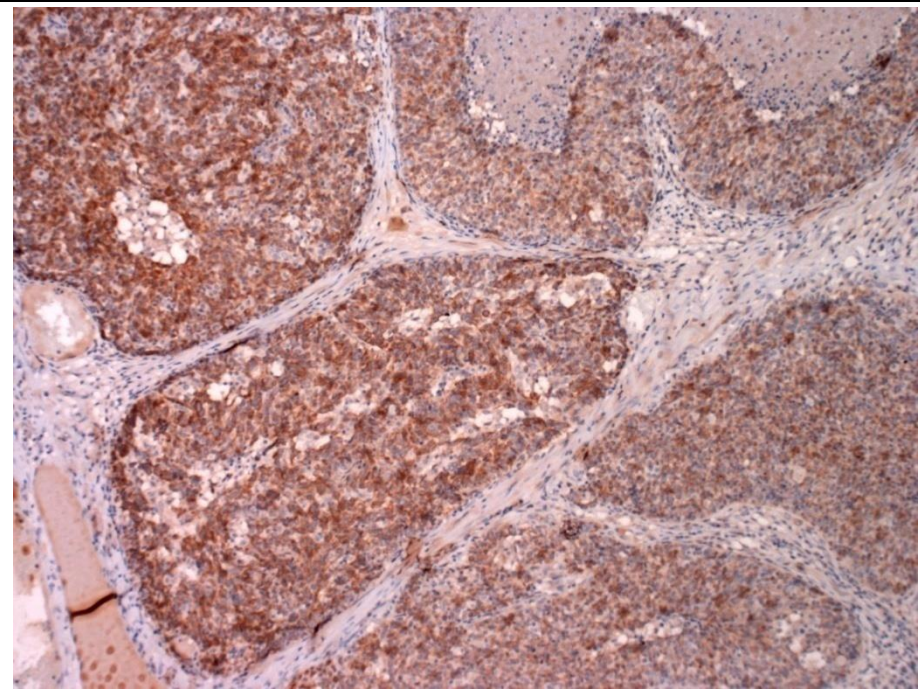


IHC v našom prípade:

- CK7+ **CK20-/+***
- p16+ p53-/+ WT1+
- ER+ PR+



*CK20-/+ (do 5%) bol zaznamenaný v jednom prípade (Soslow et al, Int J Gynecol Pathol. 1996; 15:257-65).



KLINIKA A CT VYŠETRENIE

- žiadne urologické príznaky
- obvykle sa jednalo o veľké nádory MM, resp. obličky
- žiadna anamnéza
- CT negatívne



vylúčený uropôvod

MTS TCC do ovaria

- extrémne raritné
- len 6 prípadov TCC (všetky unilaterálne)
- interval 0-4 roky (Lee et al,2010)
- len 3 prípady TCC obličky

Case Report

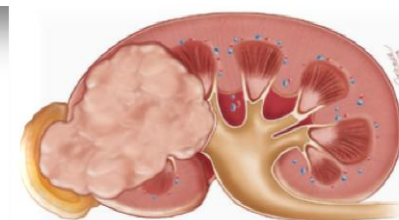
Metastasis to the ovaries from transitional cell carcinoma of the bladder and renal pelvis: a report of two cases

Maria Lee, Yong Wook Jung, Sang Wun Kim, Sung Hoon Kim, Young Tae Kim

Department of Obstetrics and Gynecology, Yonsei University College of Medicine, Seoul, Korea

Ovarian metastases from a primary urinary tract carcinoma are extremely rare. This can be difficult to distinguish from transitional cell carcinomas (TCC) of ovarian origin because of histologic similarity. A 65-year-old woman who was diagnosed with renal pelvis TCC 4 months prior was referred for evaluation of a left ovarian mass. A 47-year-old woman who underwent radical cystectomy due to bladder TCC 1 year ago was referred because of a right ovarian mass. Both patients underwent a bilateral salpingo-oophorectomy. The tumor cells had morphology identical to those of the primary urinary tract tumors. Gynecologic oncologists should consider metastatic TCC of the ovary from urinary tract origin, as well as breast, and gastrointestinal tract origins.

Key Words: Transitional cell carcinoma, Ovarian metastasis



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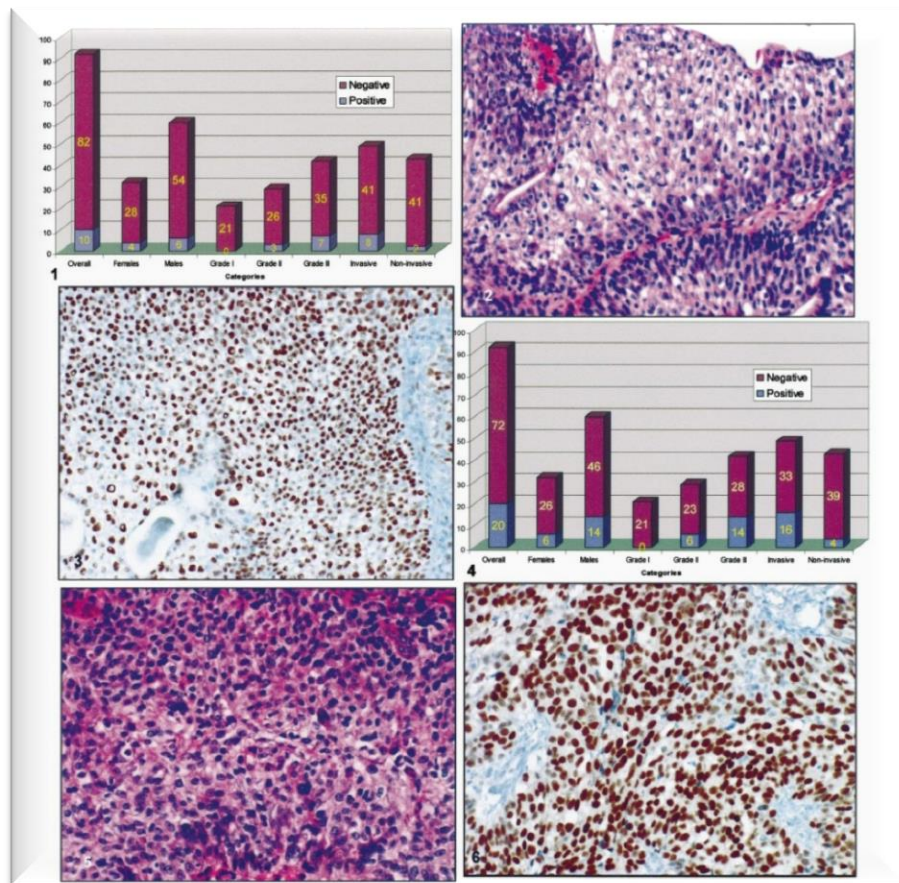
Table 1. Primary urinary tract-transitional cell carcinoma (literature review and present cases)

Investigator	Age, yr	Symptom	Primary site	Secondary site	Metachronous/ Synchronous	Treatment	Disease status
Raabe et al. ¹⁰	45	Hematuria	Left kidney	Left ovary	M-1 yr	Surgery	Alive 7 yr
Hsiu et al. ³	48	Hematuria, pelvic mass	Right kidney	Right ovary	S	Surgery, chemotherapy	DOD 6 mo
Ishii et al. ¹¹	49	Pelvic mass, hematuria	Bladder	Right ovary	S	Surgery, chemotherapy	Alive 3 yr
Kardar et al. ¹²	60	Pelvic mass	Bladder	Left ovary	M-4 yr	Surgery	DOD 3 mo
Case 1	65	Pelvic mass	Right kidney	Left ovary	M-4 mo	Surgery, chemotherapy	Alive 1 yr
Case 2	47	Pelvic mass	Bladder	Right ovary	M-1 yr	Surgery, chemotherapy	DOD 6 mo

M: metachronous, S: synchronous, DOD: dead of disease

Estrogen Receptor Expression in Papillary Urothelial Carcinoma of the Bladder and Ovarian Transitional Cell Carcinoma

Philip R. Croft, MD; Sarah L. Lathrop, DVM, PhD; Richard M. Feddersen, MD; Nancy E. Joste, MD



Results.—By the 10% criterion, 11% of PUCs of the bladder were ER positive. Invasive PUCs were more likely to be ER positive ($P = .10$). Women with ER-positive PUCs were older than their male counterparts ($P = .03$). By the second criterion, 22% of all PUCs were ER positive, and both higher grade and the presence of invasion were significantly associated with ER expression ($P = .004$ and $.01$, respectively). All 11 PUC metastases were totally ER negative. Ten of the 11 ovarian TCC cases exhibited strong and diffuse ER expression.

Conclusion.—Depending on the criterion used, up to 22% of bladder PUCs were ER positive. Higher grade and the presence of invasion were significantly associated with ER expression in these bladder carcinomas. In contrast, almost all of the ovarian TCCs marked strongly for ERs, a characteristic that may help differentiate these lesions from PUCs metastatic to the ovary.

(Arch Pathol Lab Med. 2005;129:194–199)

Otázky a odpovede

1. primárny verzus sekundárny?

primárny karcinóm ovaria

2. ak primárny, tak aký?

transitional cell karcinóm

3. primárny verzus sekundárny?

TCC ovaria



Otázky a odpovede

1. primárny verzus sekundárny?

primárny karcinóm ovaria

2. ak primárny, tak aký?

transitional cell karcinóm

3. primárny verzus sekundárny?

TCC ovaria

4. ...skutočne TCC ovaria?





REVIEW

Morphological subtypes of ovarian carcinoma: a review with emphasis on new developments and pathogenesis

W. GLENN McCLUGGAGE

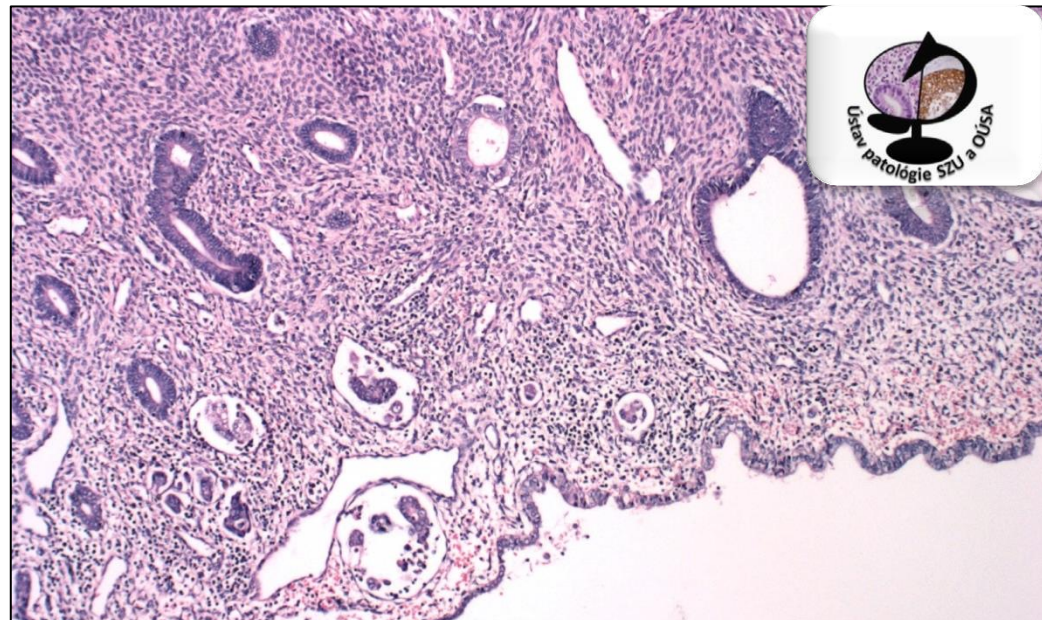
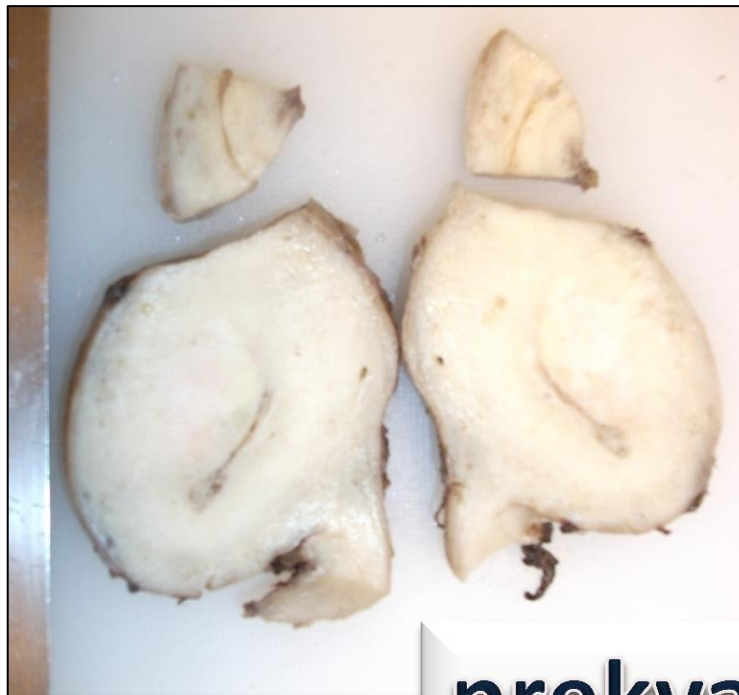
Department of Pathology, Belfast Health and Social Care Trust, Belfast, United Kingdom

Table 1 Relative frequencies of subtypes of ovarian carcinoma based on two recent population based studies

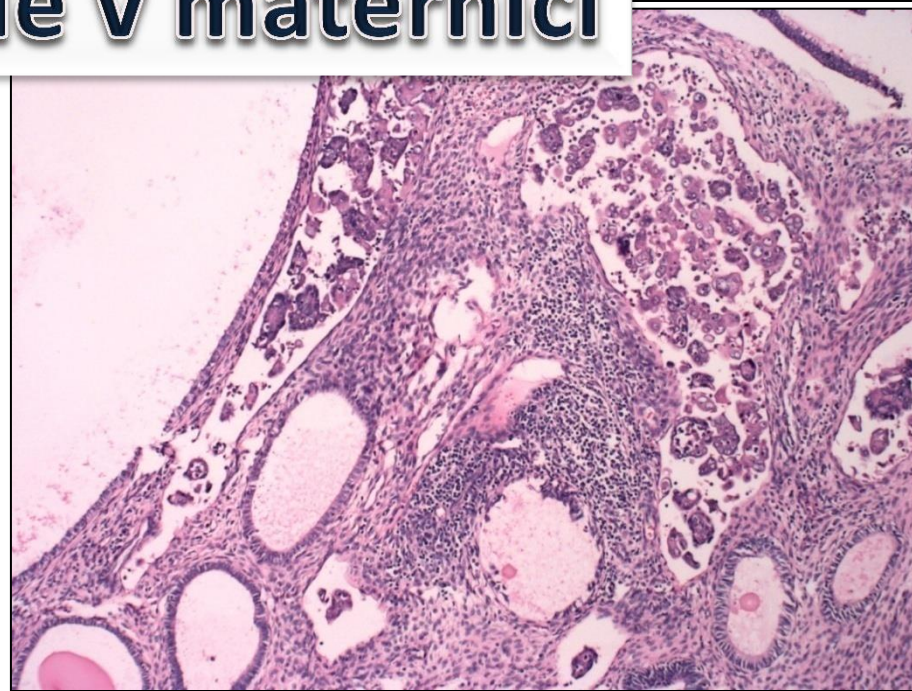
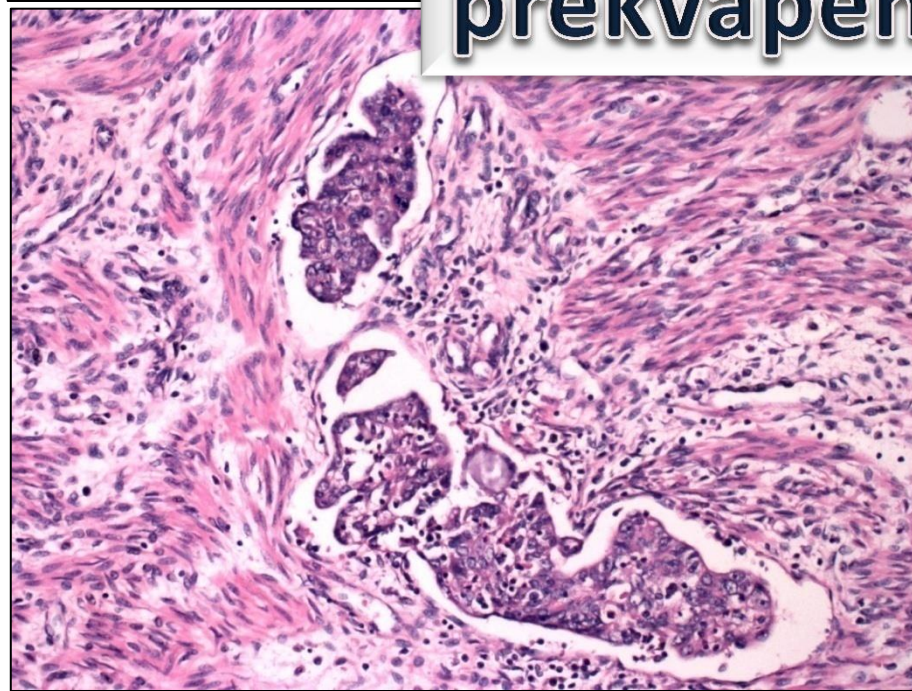
68–71% serous
3% mucinous
9–11% endometrioid
12–13% clear cell
1% transitional
6% mixed

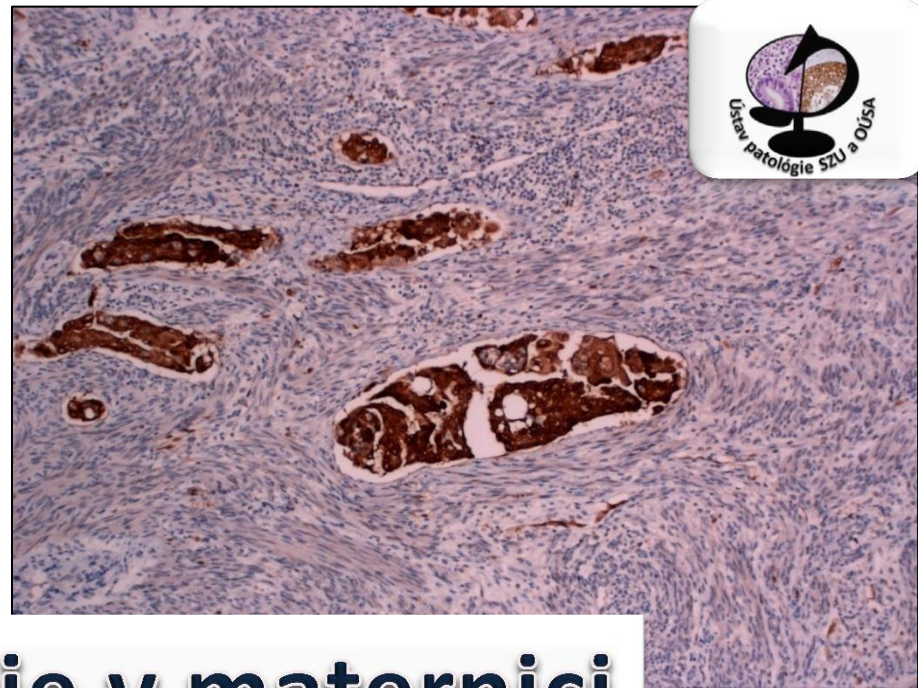
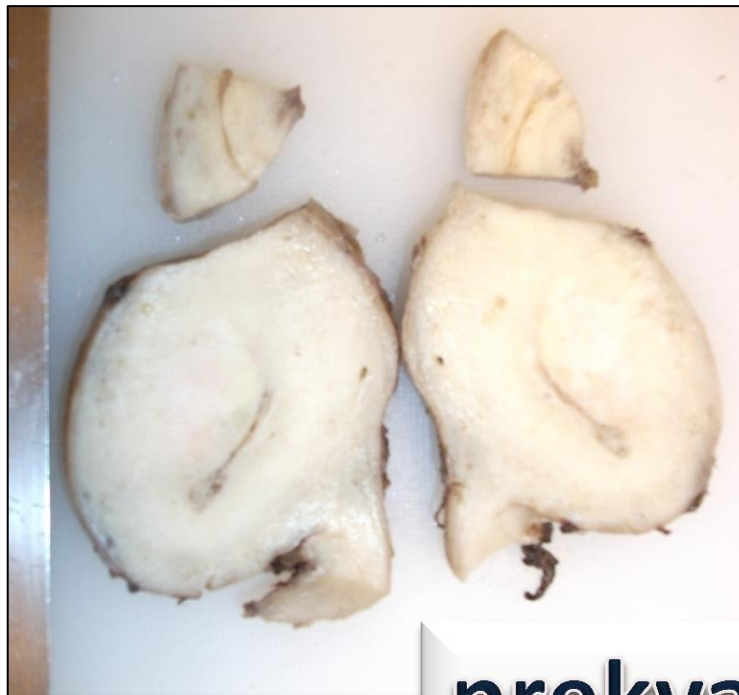
TRANSITIONAL CARCINOMA

In my opinion, primary ovarian transitional carcinomas are rare, although they do exist.⁸⁹ I feel most tumours which are diagnosed as transitional carcinoma represent variants of high grade serous carcinoma and that transitional carcinoma is a poorly reproducible diagnosis. Other tumours diagnosed as transitional carcinoma may represent endometrioid adenocarcinomas with a transitional-like growth pattern. Transitional carcinomas of the ovary express müllerian and not urothelial markers and are usually positive with WT1,⁹⁰ a point in favour of many being variants of high grade serous carcinoma. Some recur or metastasise as high grade serous carcinoma and this is further evidence that many are variants of the latter.

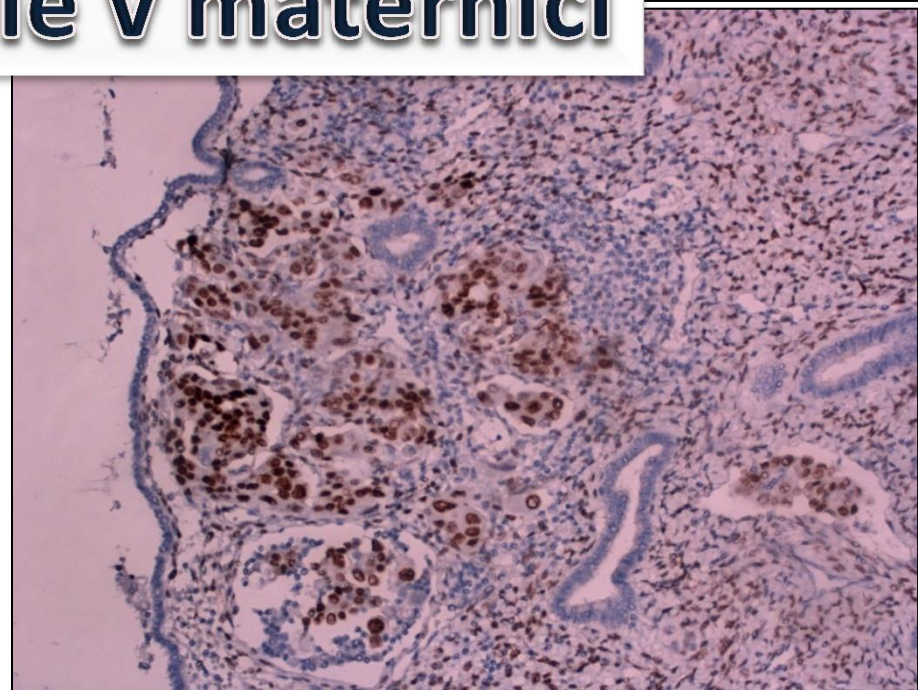
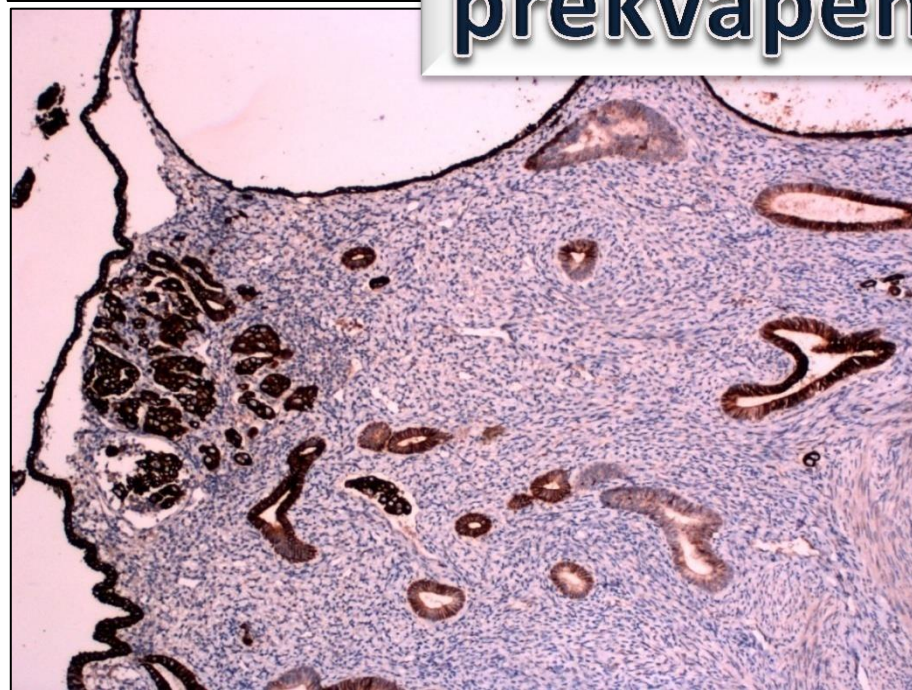


prekvapenie v maternici



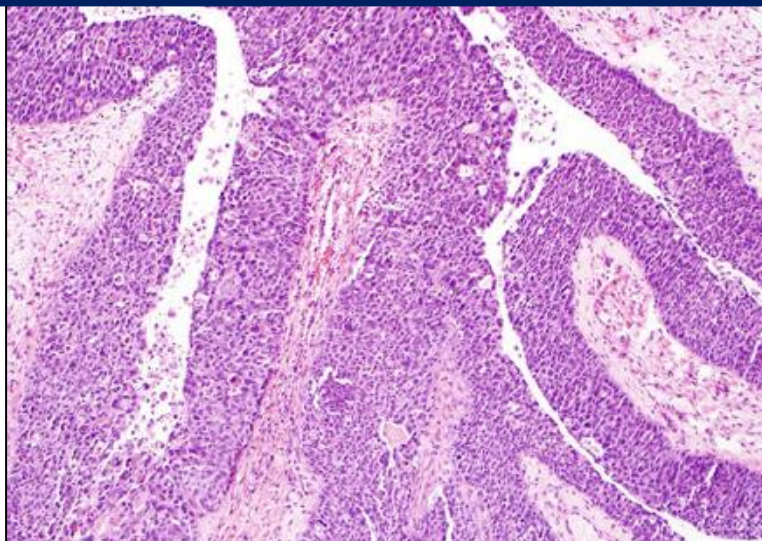


prekvapenie v maternici

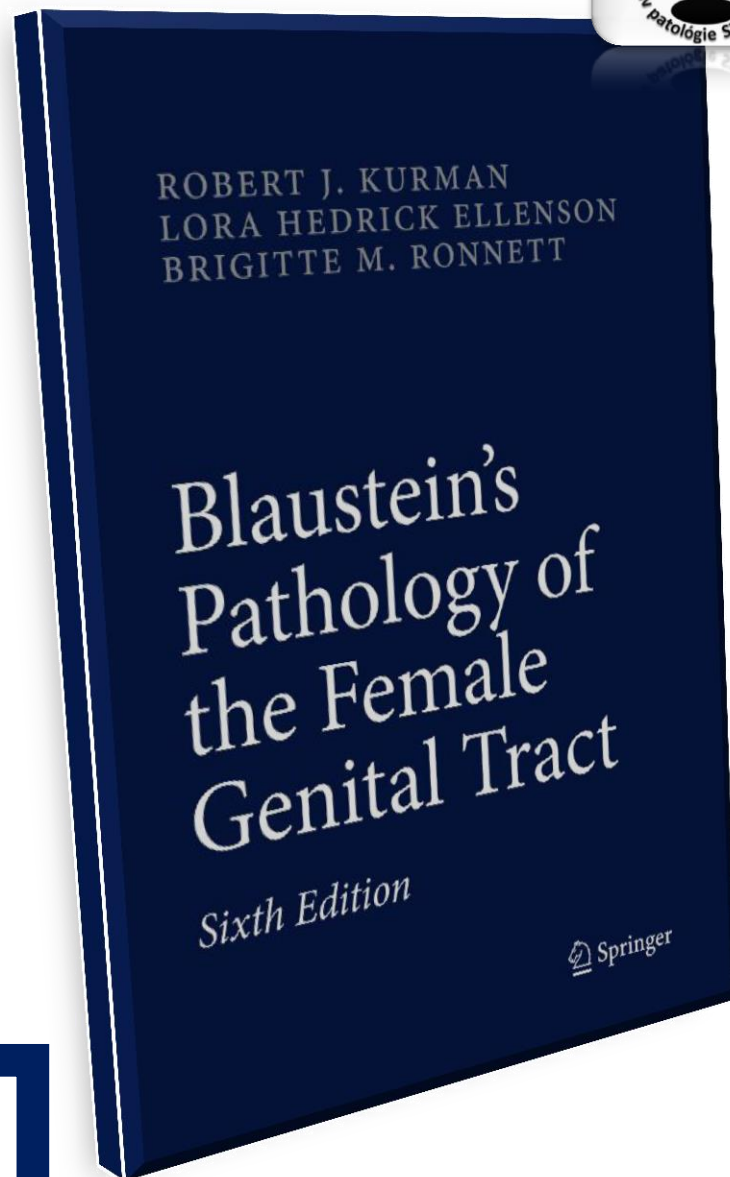


Malignant Transitional Cell Tumors (Malignant Brenner Tumors and Transitional Cell Carcinomas)

TCC. Nearly all tumors classified as ovarian transitional cell carcinomas are now regarded as high-grade serous carcinomas with transitional-like features.

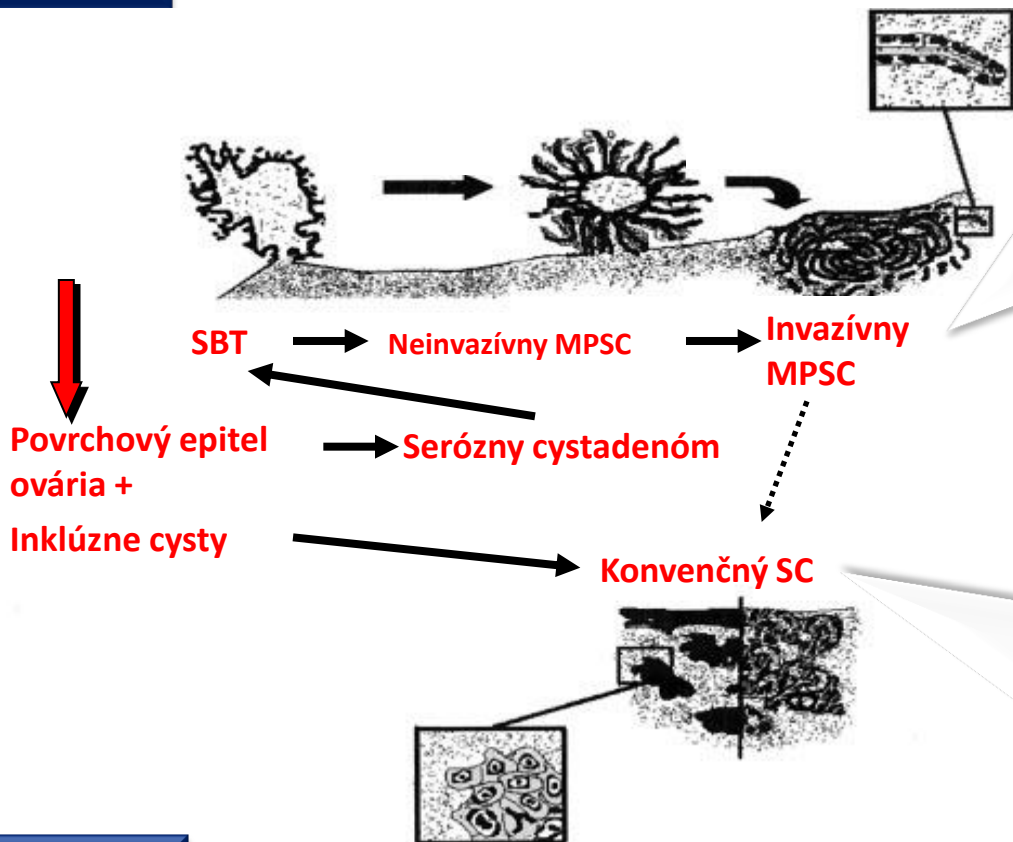


stage I. TCC is a variant of high-grade serous carcinoma and thus is a Type II tumor. This is supported by similar



2. Duálny model evolúcie OC [typ I a typ II]

TYP I



BRAF/KRAS mutácie

↓ proliferácia

↑ ↑ ↑ ↑ CIN

↑ p21/WAF

iný genový profil

5-r. OS ~ 55%

TYP II

AJP 2002; 160: 4

AJP 2004; 164: 5

p53 mutácie

↑ proliferácia

↑ ↑ ↑ ↑ CIN

↑ HLA-G expresia

5-r. OS ~ 30%

2. Duálny model evolúcie OC [typ I a typ II]



Klinicko - molekulárne charakteristiky SOC

charakteristiky	TYP I (LG-OSC)	TYP II (HG-OSC)
výskyt	~25% OSC	~75% OSC
priebeh	indolent.; 5-r OS ~55%	agres.; 5-r OS ~30%
chemoth.odpoved'	zlá	dobrá, ale rekurencie
KRAS	35%	0
BRAF	30%	0
BRAF + KRAS	65%	0
p53	0	50-80%
HLA-G	0	61%
Ki-67	~10-15%	>50%

Súčasný pohľad na typizáciu OC [HG - SOC]

- 70% všetkých OC
- 90% vš. úmrtí na OC
- 1% v št.1
- 5r. OS – 29% v št.IIIc. a 13% v št. IV.

- chromozomálna instabilita / aneuploidita – 100%
- p53 mutácie >90%; strata BRCA (30-45%)
- defekty homológnej rekombinácie
- FoxM1 (84%), RB (67%), PI3K/RAS (45%), NOTCH (22%)

Histopathology

Histopathology 2013, 62, 59-70. DOI: 10.1111/his.12033

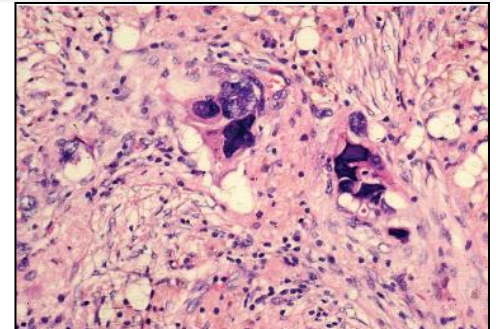
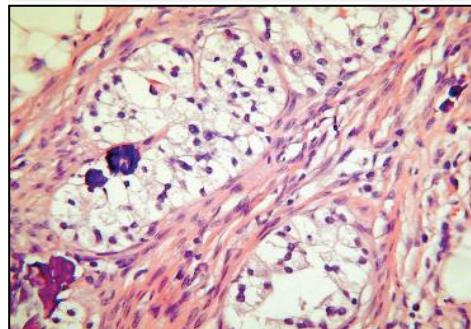
REVIEW

Molecular abnormalities in ovarian carcinoma: clinical, morphological and therapeutic correlates

Ananta Gurung,* Tawny Hung,* Jason Morin* & C Blake Gilks

Department of Pathology and Laboratory Medicine, Vancouver General Hospital, University of British Columbia, Vancouver, BC, Canada

- **chirurgický „debulking“**
- **70-80% HGSC** iniciálne odpovedá na CHT – neskôr chemorezistencia
- **inhibitory PARP** – sľubné výsledky
- anti VEGF-A



Ovarian transitional cell carcinoma represents a poorly differentiated form of high-grade serous or endometrioid adenocarcinoma

Takeuchi T, et al.; Am J Surg Pathol. 2013 Jul;37(7):1091-9

Je TCC samostatná entita alebo morfológicky variant HG SC?

- n= 488 OC = 35 prípadov TCC, 25 a 6 TCCs bolo zmiešaných s HG-SC a EC, len 4 prípady boli čisté TCC
- TCC komponenty neboli pozorované v CCC ani MC
- len 2 prípady malígneho BT

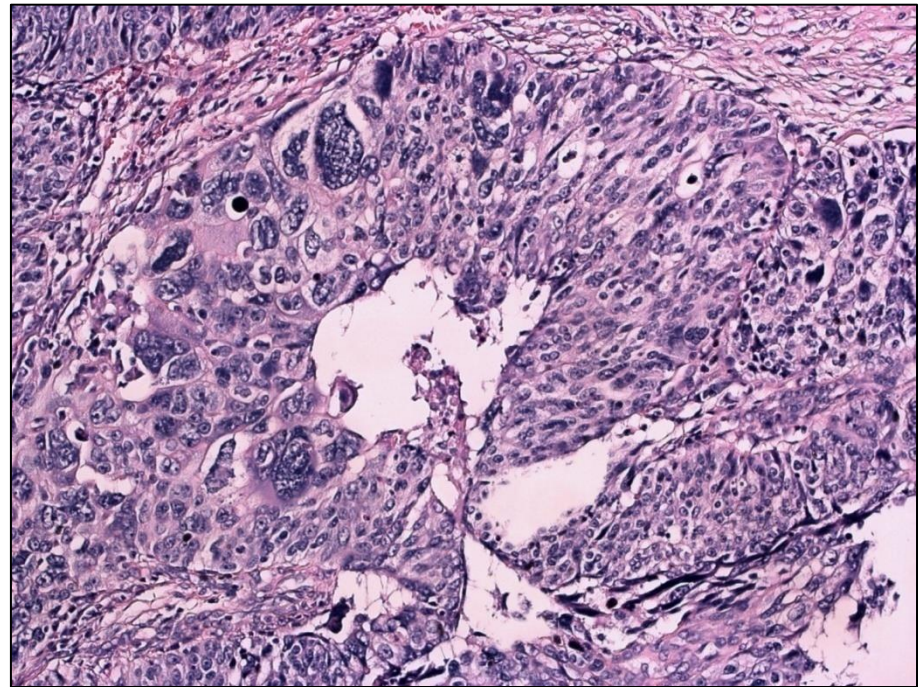
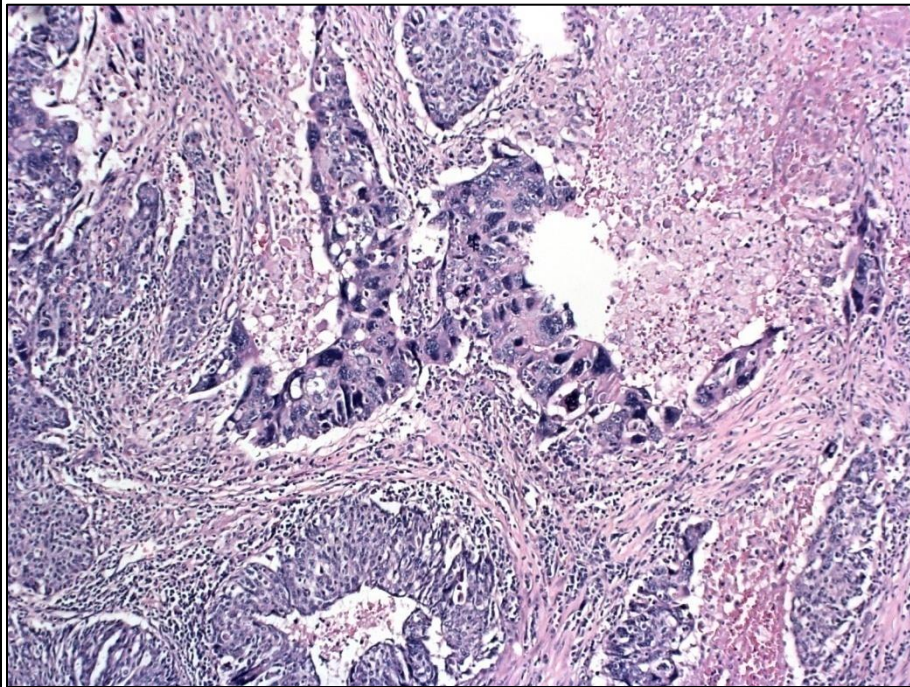
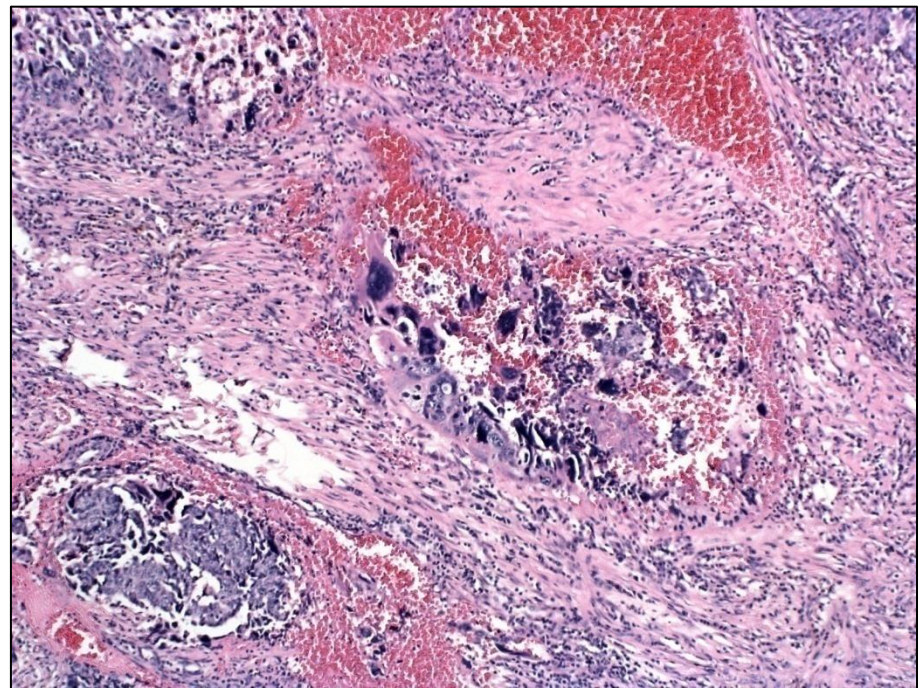
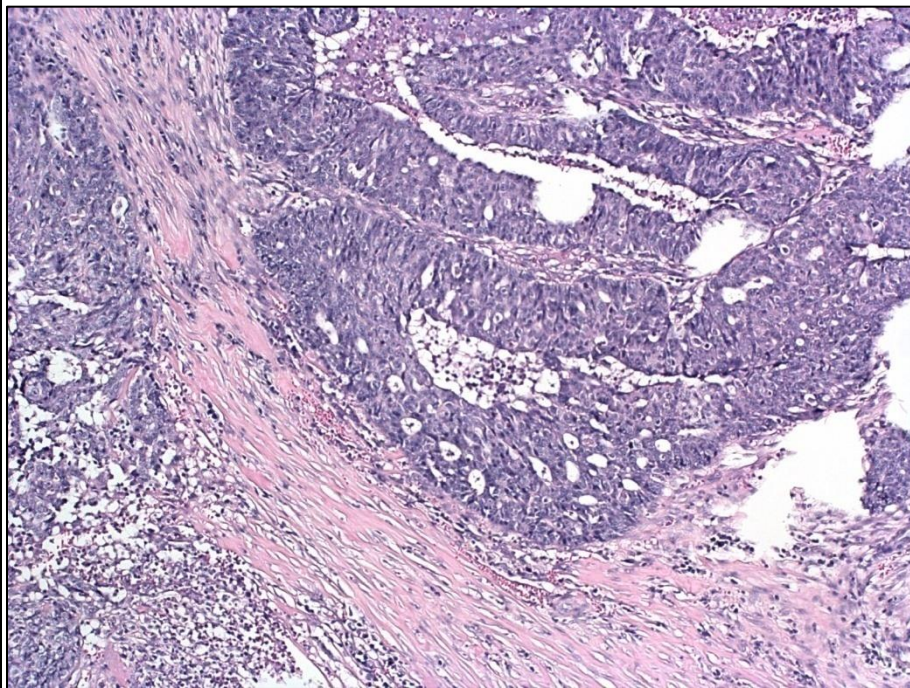
IHC – čistý TCC, TCCs HG-SC, a čistý HG-SCs boli charakterizované aberantnou p53 expresiou a WT1+/ER+/PR+/IMP2+,

IHC - BT, benígny, borderline, a malígny BT – bez p53 exprese a s WT1-/ER-/PR-/IMP2- imunofenotypom

- čistý EC a TCC zmiešaný s EC vykazuje ER+/PR+ imunofenotyp

Záver:

- **TCC nie je samostatná entita, ale zle difer. SC alebo EC**
- väčšina TCC je asociovaná s HG-SC alebo EC (občasne)
- IHC a molekulové črty TCC sú podobné ako v HG-SC alebo EC, ale rozdielne v BT



Otázky a odpovědi

1. primární verus sekundární?

primární karcinóm ovaria

2. ak primárny, tak aký?

transitional cell karcinóm

3. primárny verus sekundárny?

TCC ovaria

4. ...skutočne TCC ovaria?

HG-SC ovaria s TCC črtami

5. ...a navyše

HG-SC ovaria „BRCA-related“



Charles Zaloudek, MD
 Professor
 Department of Pathology
 UCSF

Ovarian Epithelial Tumors

Morphologic patterns associated with *BRCA1* and *BRCA2* genotype in ovarian carcinoma

Robert A Soslow¹, Guangming Han², Kay J Park¹, Karuna Garg¹, Narciso Olvera¹, David R Spriggs³, Noah D Kauff^{3,4} and Douglas A Levine⁵

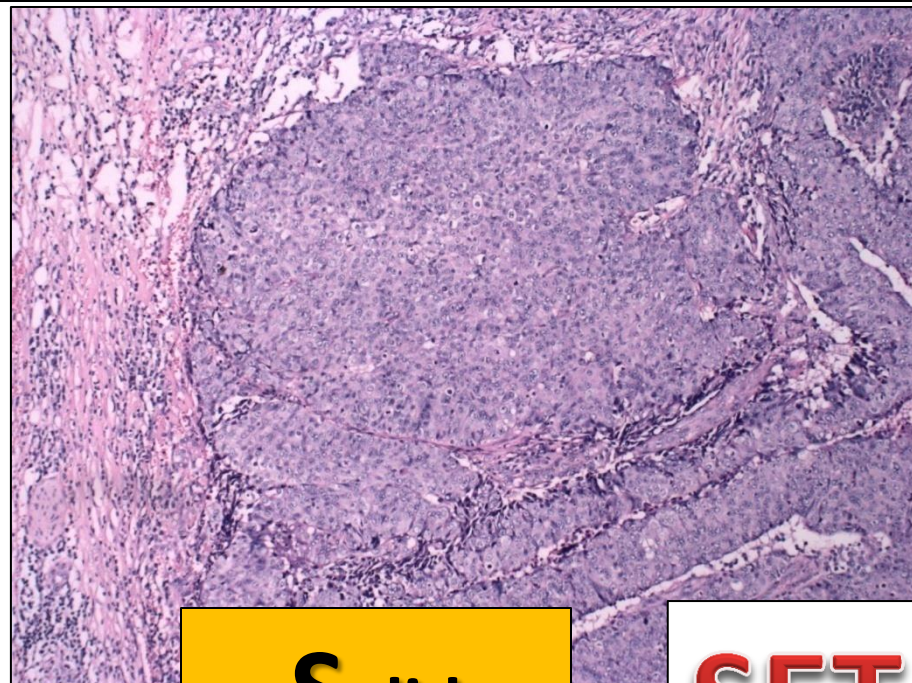
¹Department of Pathology, Memorial Sloan-Kettering Cancer Center, New York, NY, USA; ²Department of Pathology and Laboratory Medicine, University of Calgary, Calgary, Alberta, Canada; ³Gynecologic Medical Oncology Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, USA; ⁴Clinical Genetics Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, USA and ⁵Gynecology Service, Department of Surgery, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Histologic Features of *BRCA1* Associated Carcinomas

Fujiwara	Soslow
Serous or undifferentiated	Serous
Marked atypia	SET features (solid, pseudoendometrioid, transitional)
Giant bizarre nuclei	Geographic necrosis
Prominent TIL (>40/hpf)	Prominent TIL (>37/ hpf)
Numerous mitotic figures	High mitotic rate (>51/10 hpf)
All 5 compatible with <i>BRCA1</i> 3 or 4 possibly compatible with <i>BRCA1</i> 0-2 not compatible with <i>BRCA1</i>	<i>BRCA</i> related if ≥ 2 features <i>BRCA</i> indeterminate if 1 feature Not <i>BRCA</i> if no features

High Grade Serous Carcinoma Standard Histologic Features

- Cystic
- Papillae, tufts of cells, micropapillae
- Glands, labyrinthine glands, slit like glands
- Solid areas
- Cribriform glands, microcystic pattern
- High grade nuclei (grade 2 or 3)
- High mitotic rate (> 12/10 hpf)

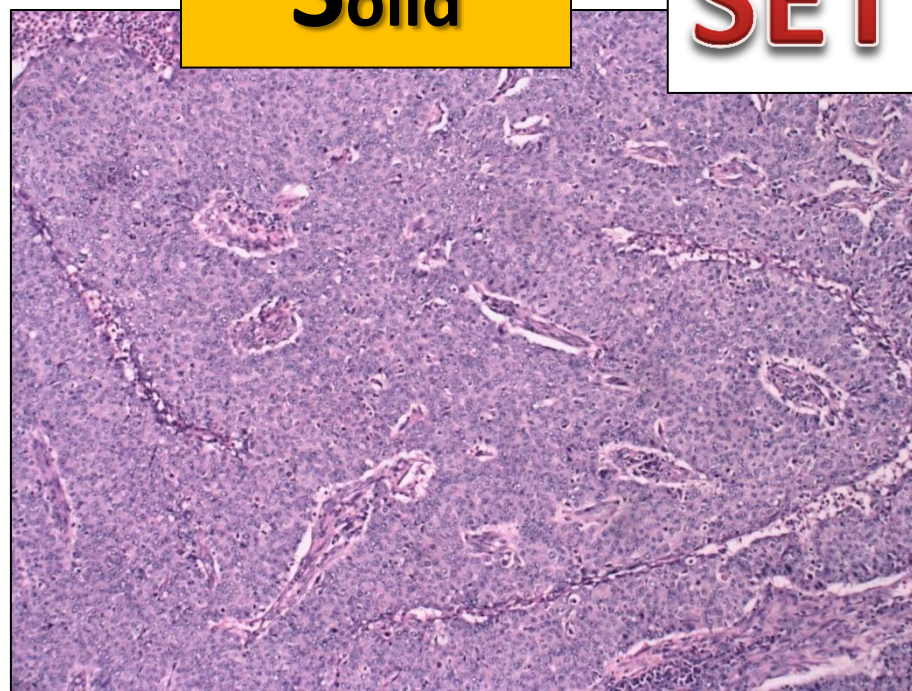


Solid



pseudo**E**ndometroid

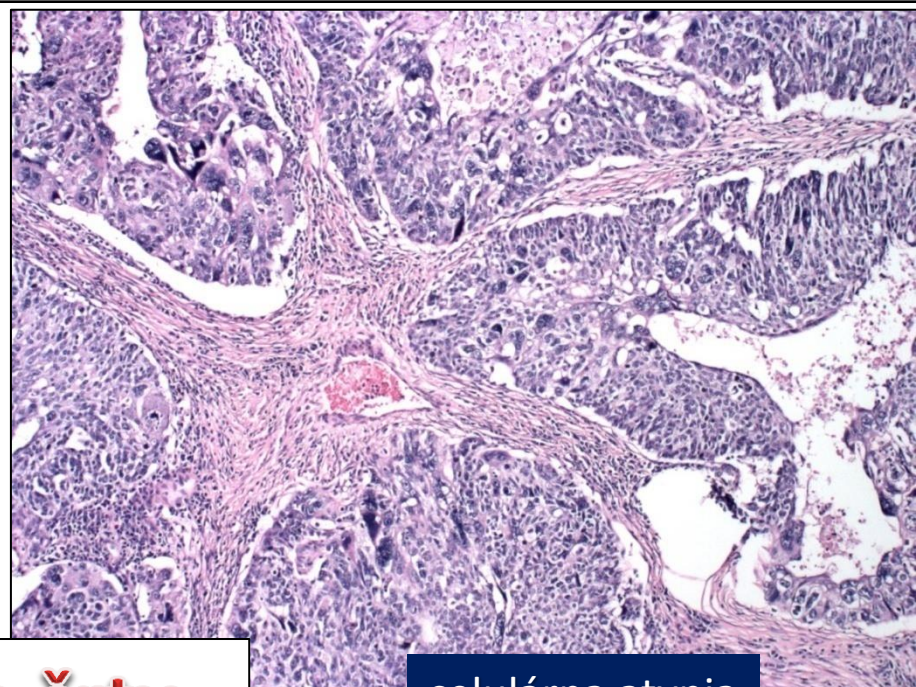
SET črty



Transitional cell ca morfol.

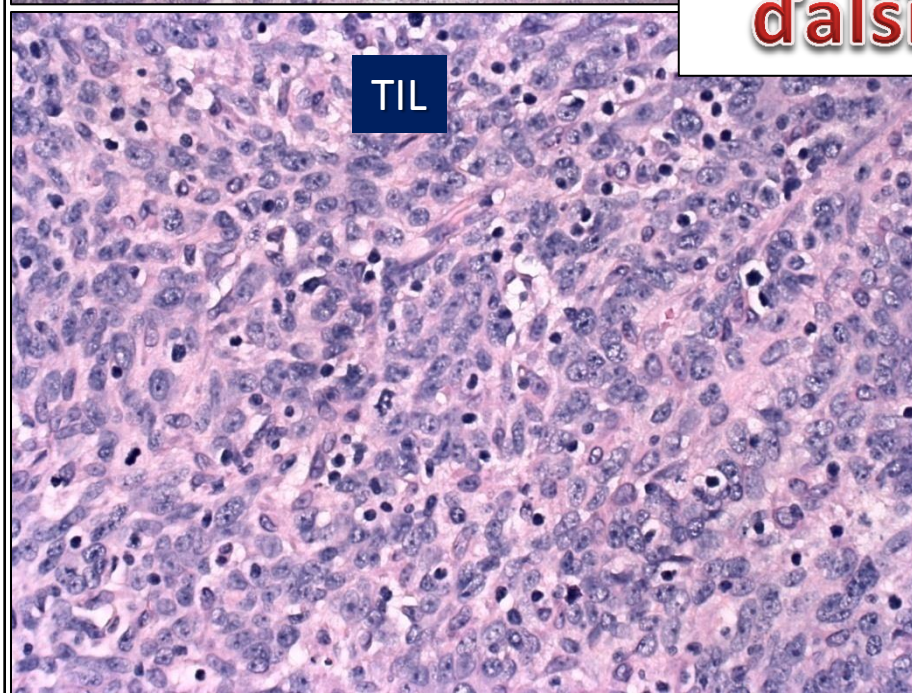


nekróza

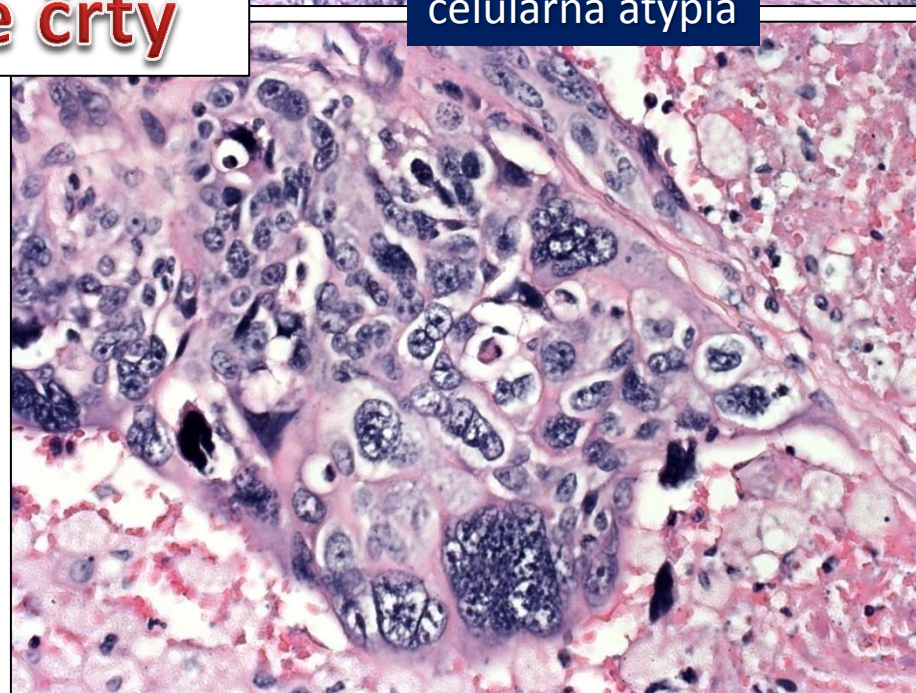


celulárna atypia

d'alšie črty



TIL



3. Model – falopiánska tuba ako zdroj ovariálnych a peritoneálnych nádorov

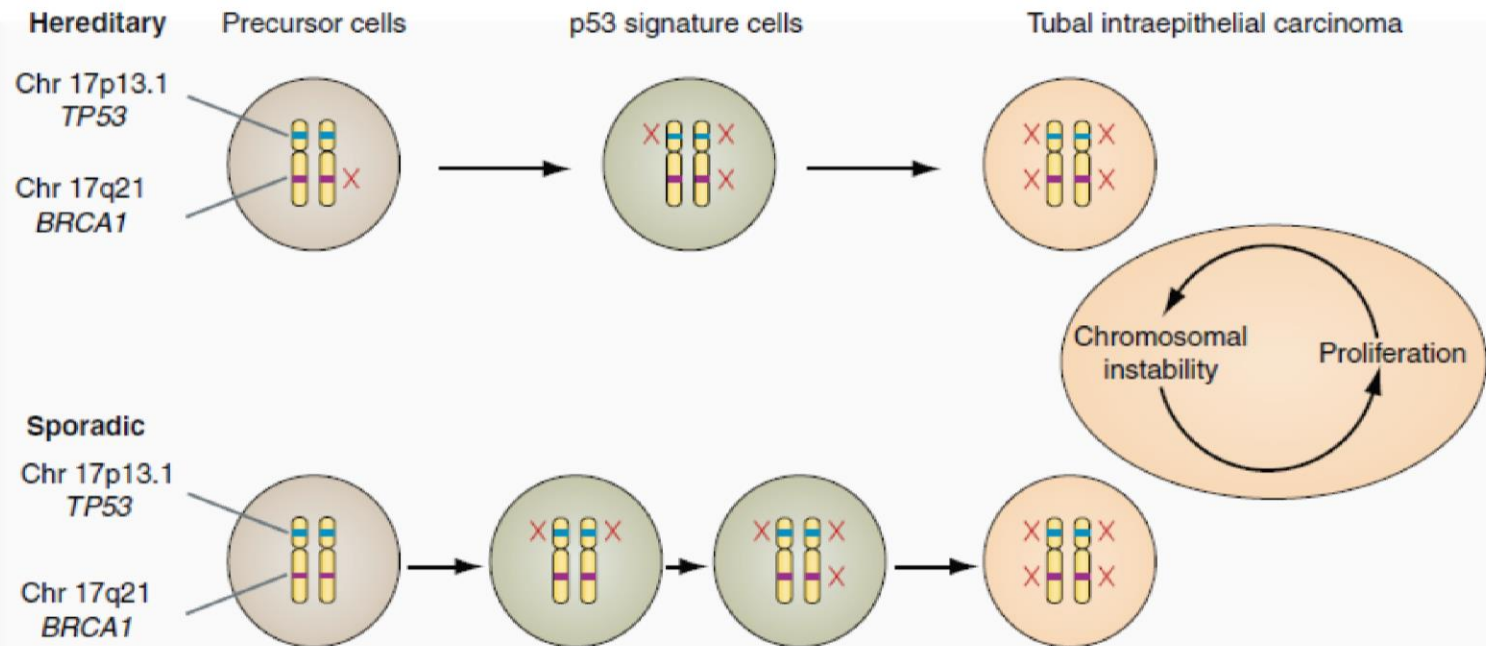
- 11-15% OC je spojených s BRCA
- BRCA1+ alebo BRCA2+ = 15-40%
- pct s BRCA+ → profylakt. bilat.

Clinical Medicine & Research
Volume 5, Number 1: 35-44
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<http://www.clinmedres.org>

Review

Lessons from BRCA: The Tubal Fimbria Emerges as an Origin for Pelvic Serous Cancer

Christopher P. Crum, MD; Ronny Drapkin, MD, PhD; David Kindelberger, MD;
Fabiola Medeiros, MD; Alexander Miron, PhD; and Yonghee Lee, MD



Proposed sequence of molecular changes during the pathogenesis of high-grade serous carcinomas

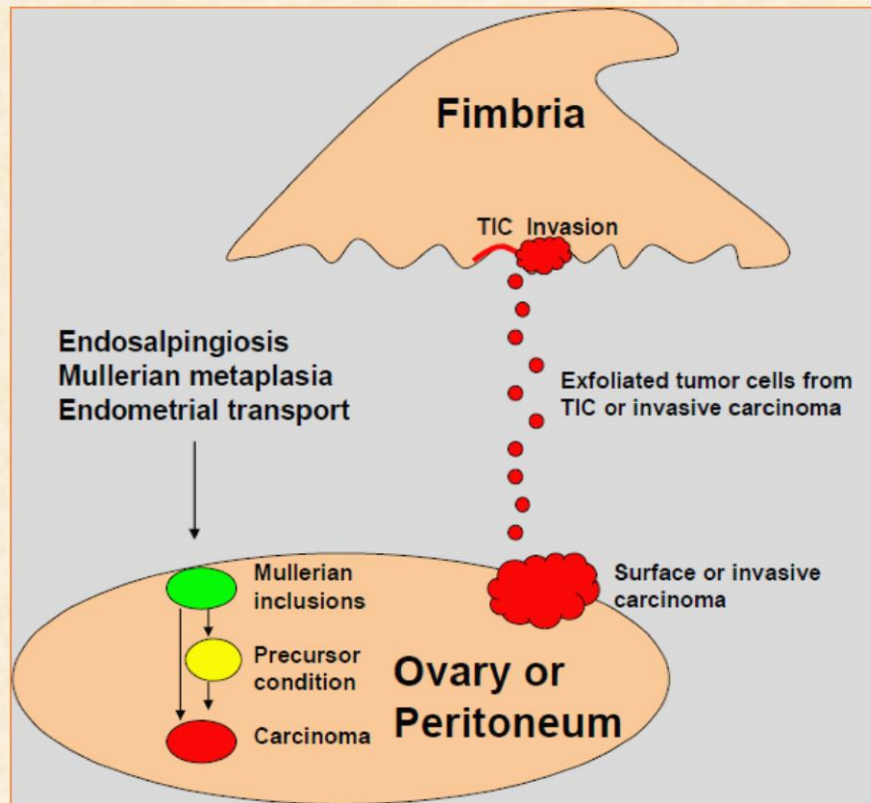
Expert Reviews in Molecular Medicine © 2008 Cambridge University press

2001 – P
6 STIC (5
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(prehľad
2010)
revolučn
Medeiro
n=13 /3
fimbrií –

3. Model – falopiánska tuba ako zdroj ovariálnych a peritoneálnych nádorov

Tubárny pôvod HG SOC

A Fimbrial-Ovarian Model of Serous Carcinogenesis



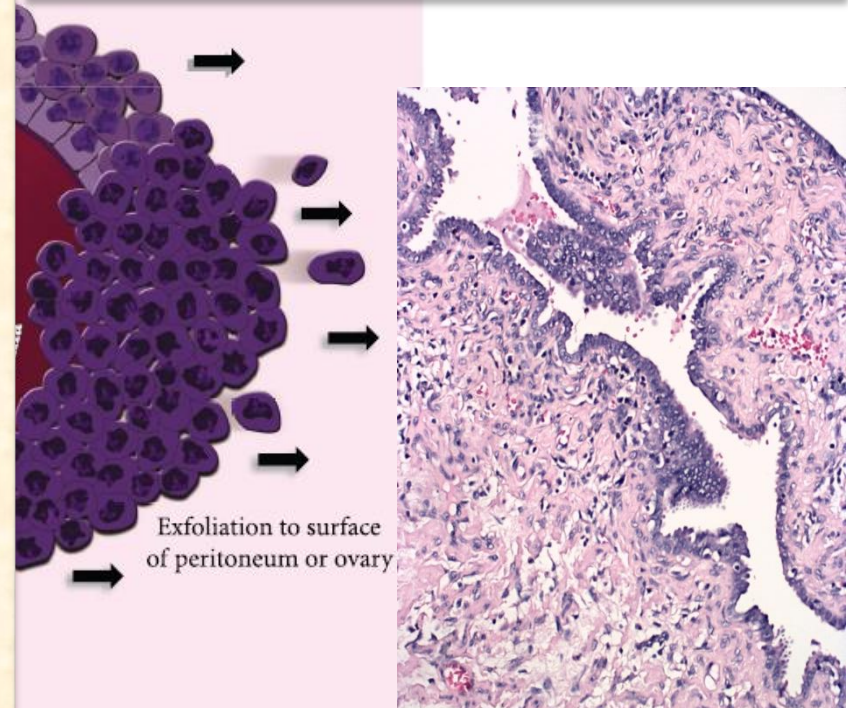
Kindelberger 2007

Hindawi Publishing Corporation
Journal of Oncology
Volume 2010, Article ID 932371, 13 pages
doi:10.1155/2010/932371

Review Article

Ovarian Cancer Pathogenesis: A Model in Evolution

Alison M. Karst¹ and Ronny Drapkin^{1,2}



... okrem už spomenutých MTS (napr. u-TCC):

- **EC s TCC-like morfológiou** (asociovaný s konvenčným EC/WT1-/p53-/p16-) – morfológia neovplyvňuje prognózu (Karnezis et al, 2003)
- **MTS skvamózneho Ca cervixu do vaječníka???**



Tumor – markery a súčasný stav pacientky

TUMOR MARKER	25.07.2013	13.09.2013	Norma
CEA	0,3	0,3	4,0
CA19-9	5,8	12,4	30,0
CA125	785,4	27,6	30,0
HE4	191,7	175	150
ROMA –PRE	71,6	62,5	<12,9
ROMA - POST	90,5	42,9	<24,7
CA15-3		50,8	28,0
CA72,4		3,6	4,0
TPS		19,5	80,0

pct. na 2.línii chemoterapie – taxol a karboplatina

...dovetok



...dovetok

...lebo:

- **pribúdajú a budú pribúdať synchronne a najmä metachrón. nádory** (napr. u BRCA- alteráciami)
- **patológ môže poukázať na možnosť genetických alterácií**
- akokoľvek budeme subtypizovať ovariálne karcinómy, mnohokrát sa vrátíme späť a zaradíme ich tam, kam patria – medzi **tubárne nádory**



d'akujem za pozornosť

PodĎakovanie Lige proti rakovine za podporu projektu FISH diagnostiky na Ústave patológie SZU a OÚSA.



LIGA PROTI
RAKOVINE

