ЛЕКАРСКА КОМОРА СРБИЈЕ
SERBIAN MEDICAL CHAMBER

DANI SRPSKE MEDICINSKE DIJASPORE 2012

PREOPERATIVNA I INTRAOPERATIVNA DIJAGNOSTIKA U HIRURŠKOJ PATOLOGIJI UROGENITALNOG TRAKTA

Prim. dr R. Radosavljević, ass mr sci med
Patohistološka laboratorija dr Radosavljević - US Medical School

DANI SRPSKE MEDICINSKE DIJASPORE

I PERIOD RAZVOJA HIRURŠKE PATOLOGIJE

- PIONIRI HIRURŠKE PATOLOGIJE

  - KLINIČKA HIRURGIJA PARISKOG UNIVERZITETA 1853.G. NE TREBA MIKROSKOPSKI PREGLED UKLONJENOG TKIVA DA LI JE MALIGNO

  - 1870.G. CARL RUGE, JOHANN VEIT- BERLINSKI UNIVERZITET - UVELI HIURURŠKU BIOPSIJU KAO OSNOVNI DG POSTUPAK

DANI SRPSKE MEDICINSKE DIJASPORE

I PERIOD RAZVOJA HIRURŠKE PATOLOGIJE

- PIONIRI HIRURŠKE PATOLOGIJE
  - 1889.G. FRIEDRICH VON ESMARK, PROF. HIRURGIJE U KIELU- KONGRES VOJNIH HIRURGA- POTREBNA MIKROSKOPSKA DG KOD SUMNJE NA VEOMA MALIGNE TUMORE ZBOG ADEKVATNE TERAPIJE-OPERACIJE
  - MIKROTOM UVEDEN ZA SEČENJE ZAMRZNUTIH TKIVA

DANI SRPSKE MEDICINSKE DIJASPORE

I PERIOD RAZVOJA HIRURŠKE PATOLOGIJE

- PIONIRI HIRURŠKE PATOLOGIJE
  - SAD- SPECIJALIZACIJU HIRURŠKE PATOLOGIJE INICIRALI SU HIRURZI I GINEKOLOZI PORED PATOLOGA
  - WILLIAM S. HALSTED -PRVI AMERIČKI HIRURG OSNOVAO ODSEK HIRURŠKE PATOLOGIJE U HOPKINSU, JOSEPH COLT BLOODGOOD ('KRVAVI') – PRVI AMERIČKI HIRURŠKI PATOLOG.

DANI SRPSKE MEDICINSKE DIJASPORE

II PERIOD RAZVOJA HIRURŠKE PATOLOGIJE

- RADILI LEKARI PATOLOZI- 2 ŠKOLE- OPŠTIH I HIRURŠKIH PATOLOGA

- U 20.VEKU PRVA POLOVINA- SAD

DANI SRPSKE MEDICINSKE DIJASPORE

II PERIOD RAZVOJA HIRURŠKE PATOLOGIJE

- PURDY STOUT- COLUMBIA-PRESBYTERIAN HOSPITAL,NY
- RAFFAELE LATTES, JAMES EWING,FRED STEWART-MEMORIAL HOSPITAL, NY, MALCOLM DOCKERTY-MAYO CLINIC

DANI SRPSKE MEDICINSKE DIJASPORE

II PERIOD RAZVOJA HIRURŠKE PATOLOGIJE

- LAUREN V.ACKERMAN- BARNES HOSPITAL, ST.LOUISE, MISSOURI
- PIERRE MASSON, FRANCUSKA, KANADA
- RUPERT A. WILLIS, AUSTRALIA, ENGLAND

DANI SRPSKE MEDICINSKE DIJASPORE

- HIRURŠKA PATOLOGIJA- MULTIDISCIPLINARNI PRISTUP

- PATOLOG, HIRURG, ONKOLOG,RADIOLOG,INTERNISTA, GINEKOLOG...

DANI SRPSKE MEDICINSKE DIJASPORE

- MIKROSKOPSKA DIJAGNOZA- DOBIJA PUNO ZNAČENJE SAMO KADA JE PATOLOG UPOZNAT SA OSNOVNIM KLINIČKIM PODACIMA, HIRURŠKOM NALAZU I VRSTI HIRURŠKE INTERVENCIJE

DANI SRPSKE MEDICINSKE DIJASPORE

- VELIKE POSLEDICE- MEDICINSKE, FINANSIJSKE,PRAVNE

DANI SRPSKE MEDICINSKE DIJASPORE

BIOPSIJE

- INTERPRETACIJA HISTOLOŠKIH NALAZA BIOPSIJE NAJVAŽNIJI ZADATAK HIRURŠKIH PATOLOGA

DANI SRPSKE MEDICINSKE DIJASPORE

BIOPSIJE

- INCIZIONA BIOPSIJA
- EKSCIZIONA BIOPSIJA
- INSTRUMENT: HLADNI NOŽ, KAUTER, IGLA, ENDOSKOP
- PRAVILA PRI BIOPTIRANJU- KVALITETAN UZORAK

DANI SRPSKE MEDICINSKE DIJASPORE

- INTRAOPERATIVNA ANALIZA- EX TEMPORE- FROZEN SECTION

DANI SRPSKE MEDICINSKE DIJASPORE

- ISKUSTVO, POZNAVANJE KLINIČKE MEDICINE I PATOLOGIJE, PRAVILNA PROCENA, KONZERVATIVNI KARAKTER, OGRANIČENOST METODA

DANI SRPSKE MEDICINSKE DIJASPORE

DIJAGNOSTIČKA CITOLOGIJA

- POUZDANA- SPECIJALISTI CITOLOZI, PATOLOZI , ISKUSNI

DANI SRPSKE MEDICINSKE DIJASPORE

DIJAGNOSTIČKA CITOLOGIJA

- LAŽNO NEGATIVNI I LAŽNO POZITIVNI NALAZI

- EKSFOLIJATIVNA CITOLOGIJA

DANI SRPSKE MEDICINSKE DIJASPORE

DIJAGNOSTIČKA CITOLOGIJA

•ASPIRACIJA/PUNKCIJA TANKOM IGLOM-FNA 1920. MEMORIAL HOSPITAL , NY, SAD

DANI SRPSKE MEDICINSKE DIJASPORE

- OGRANIČENJA U CITOLOGIJI
- NOVE CITOLOŠKE METODE-CITOLOGIJA TANKOG SLOJA-THIN-LAYER CYTOLOGY, THINPREP, AUTOCYTE
- AUTOPAP

DANI SRPSKE MEDICINSKE DIJASPORE

- DIGITALNA I TELEPATOLOGIJA
-
- INFORMACIONE TEHNOLOGIJE U HIRURŠKOJ PATOLOGIJI

DANI SRPSKE MEDICINSKE DIJASPORE

- PRAVNI ASPEKTI U HIRURŠKOJ PATOLOGIJI

PATOLOGIJA BUBREGA

- KONGENITALNE ANOMALIJE
- INLAMACIJE
- NEOPLAZME
- CISTIČNE BOLESTI I DISPLAZIJA BUBREGA

KONGENITALNE ANOMALIJE

- AGENEZIJA
- HIPOPLAZIJA
- PREKOBROJNI, EKTOPIČNI I SPOJENI BUBREZI (POTKOVICASTI)
- ANOMALNA VASKULARIZACIJA- ANOMALNO SNABDEVANJE KRVLJU

INFLAMACIJE

- PYELONEPHRITIS
- PAPILARNA NEKROZA
- XANTHOGRANULOMATOUS PN
- MALAKOPLAKIA
- TUBERCULOUS

PIJELONEFRITIS I DRUGA INTERSTICIJALNA INFLAMATORNA OBOLENJA

- Pyelonephritis - infektivni proces intersticijelnog renalnog tkiva, pelvisa i tubula, obično izazvanih bakterijama i drugim raznim uzrocima
- Predisponirajuci faktori - kongenitalne anomalije, opstrukcija donjeg urotrakta (neoplazma najčešće), vezikoureteralni refluks

PIJELONEFRITIS

- ASCENDENTNI AKUTNI (RETROGRADNI)
- eksperimentalno-ubrizgavanjem proteusa u besiku –rats-pacova. Nadju se posle 24-48h –prvo invadiraju pelvis, medulu i korteks.

PIJELONEFRITIS

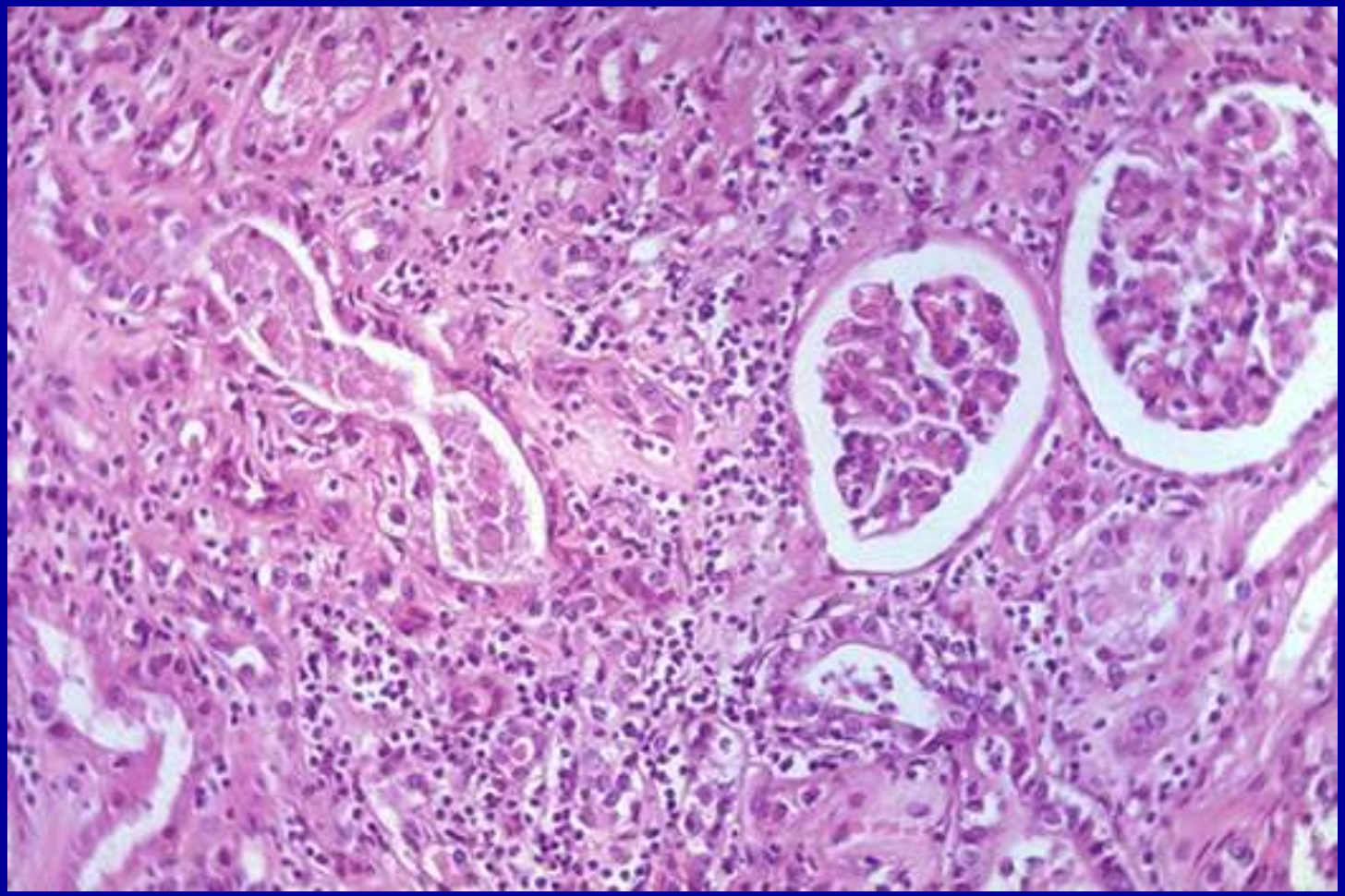
- HEMATOGENO AKUTNI- eksperimentalno opstrukcijom uretera rabbits i injekcijom bakterija iv. Akutni PN je nadjen u bubrega sa ureteralnom opstrukcijom.

PIJELONEFRITIS

- Kod ljudi najčešće ascendentni. Diskretni apscesi bubrega (mikroapscesi) .
- Mi: polimorfonuklearni leukociti u renalnim tubulima i renalnom parenhimu.
- Glavna podrucja zahvaćena su: renalni pelvis i intersticijelno podrucje papila, medule i korteksa. Sacuvani su obično krvni sudovi i glomeruli. Siri se iz sabirnih kanalcia, gram – E. coli, klebsiella, proteus, aerobacter-ascendentni. Hematogeni-stafiloko, udruzen sa septikemijom. Gram- septikemija sa hematogenim PN posle uretralne instrumentacije. Fungalna septikemija kod dijabetičara i imunosuprimiranih osoba.

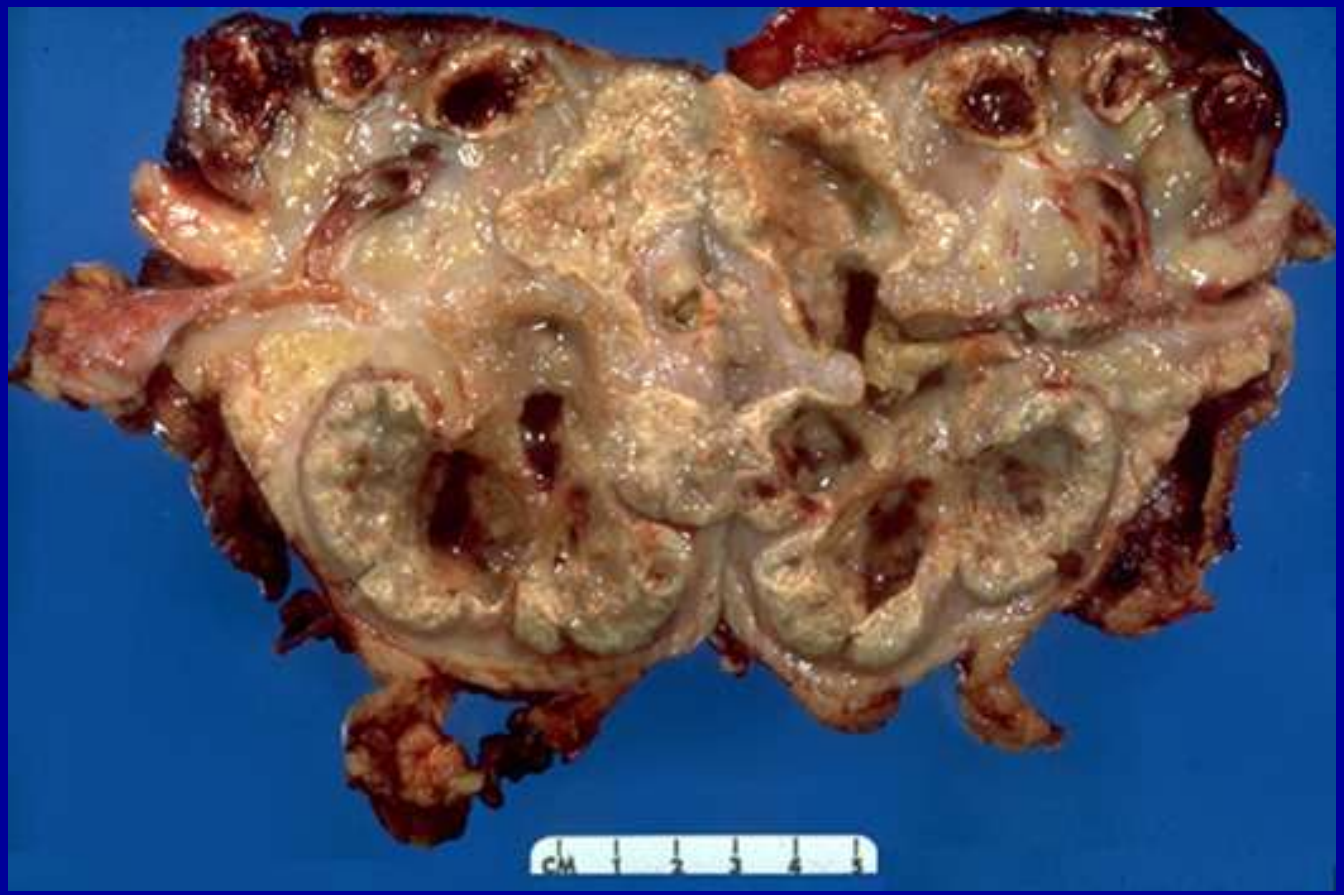
HRONIČNI PIJELONEFRITIS

HRONIČNI PIJELONEFRITIS



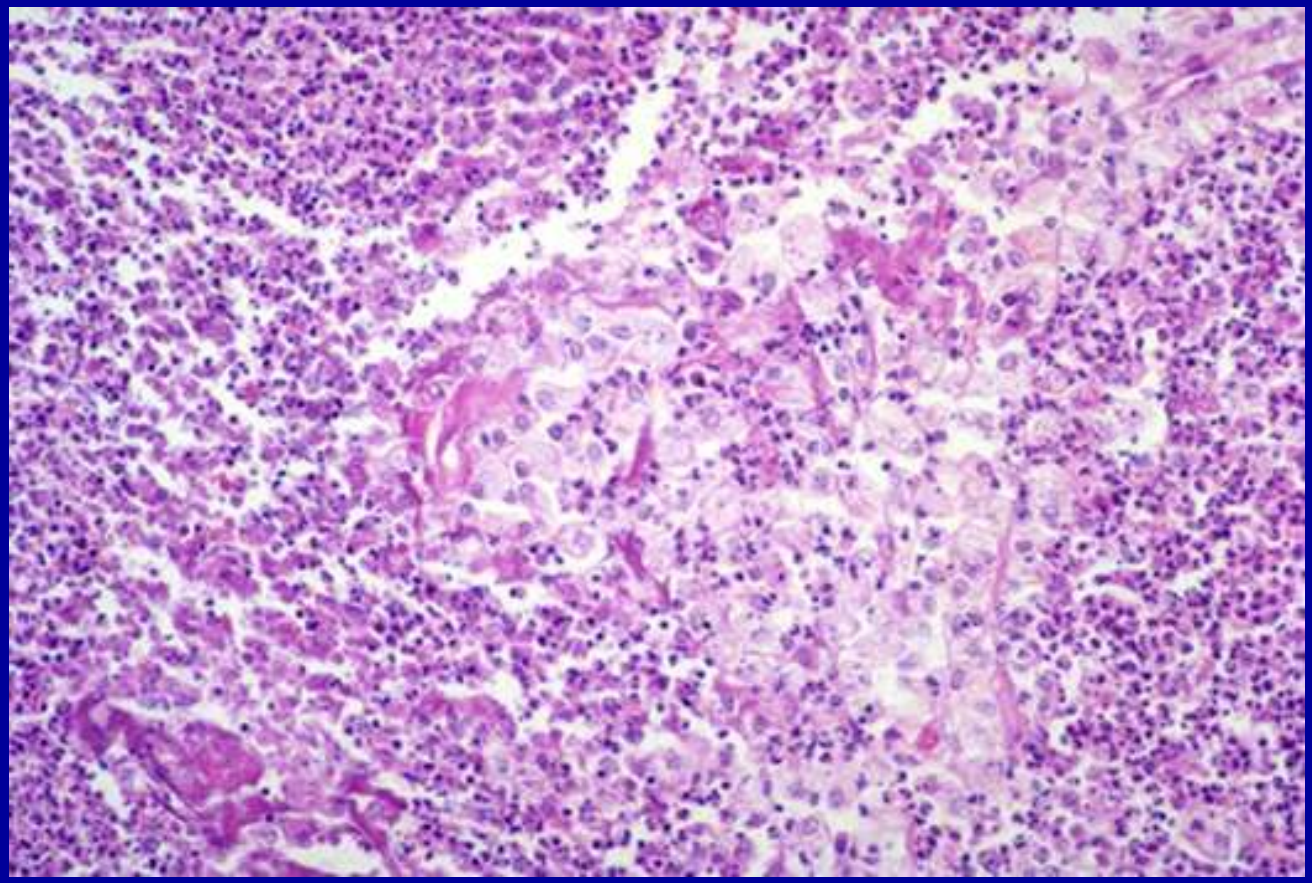
SPECIFIČNI TIPOVI HRONIČNOG PIJELONEFRITISA

- XANTHOGRANULOMATOUS PN (XPN)



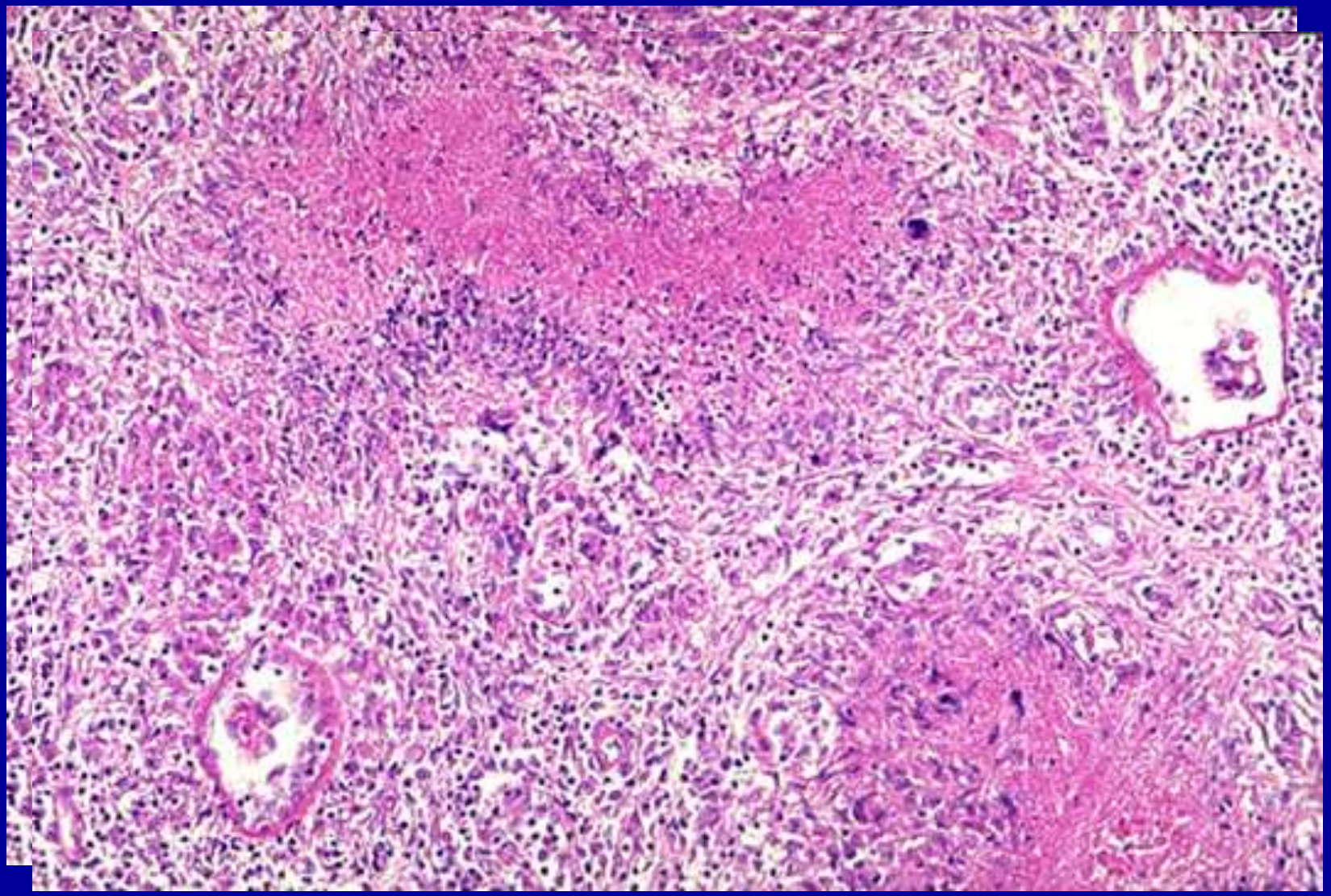
SPECIFIČNI TIPOVI HRONIČNOG PIJELONEFRITISA

- XANTHOGRANULOMATOUS PN (XPN)



TUBERKULOZA

TUBERKULOZA



TUBULOINTERSTICIJALNI NEFRITIS

- Counsilman prvi termin intersticijalni nefritis, 1898g. difterija i scarlet fever.
- Vise bolesti sa inflamacijom koja zahvata prvo intersticijum i tubule bubrega, cuvajuci glomerule. Etiologija je razlicita.

TUBULOINTERSTICIJALNI NEFRITIS

- Klasifikacija-adaptirana od Cotran RS, 1982.
  - bakterijske infekcije-akutni i hronični PN
  - VUR (reflux nefropatija)
  - Lekovima uzrokovana bolest-akutna hipersenzzitivna nefropatija, analgezicna nefropatija, litijumska npt, drugim lekovima izazvane npt-cis-platin i dr.
  - Metabolicki poremecaji-uratna npt. , hiperkalcemijska, hipokalemijska, oxylate npt.
  - teskim metalima

TNM CLASSIFICATION OF RENAL CELL CARCINOMA

- T Primary Tumour
- TX Primary tumour cannot be assessed
- T0 No evidence of primary tumour

TNM CLASSIFICATION OF RENAL CELL CARCINOMA

- T1 Tumour 7 cm or less in greatest dimension, limited to the kidney
- T1a Tumour 4 cm or less
- T1b Tumour more than 4 cm but not more than 7 cm
- T2 Tumour more than 7 cm in greatest dimension, limited to the kidney
- T3 Tumour extends into major veins or directly invades adrenal gland or perinephric tissues but not beyond Gerota fascia

TNM CLASSIFICATION OF RENAL CELL CARCINOMA

- T3a Tumour directly invades adrenal gland or perinephric tissuesa but not beyond Gerota fascia
- T3b Tumour grossly extends into renal vein(s)b or vena cava or its wall below diaphragm
- T3c Tumour grossly extends into vena cava or its wall above diaphragm
- T4 Tumour directly invades beyond Gerota fascia

TNM CLASSIFICATION OF RENAL CELL CARCINOMA

- N Regional Lymph Nodes
- NX Regional lymph nodes cannot be assessed
- N0 No regional lymph node metastasis
- N1 Metastasis in a single regional lymph node
- N2 Metastasis in more than one regional lymph node

TNM CLASSIFICATION OF RENAL CELL CARCINOMA

- M Distant Metastasis
- MX Distant metastasis cannot be assessed
- M0No distant metastasis
- M1Distant metastasis

TNM CLASSIFICATION OF RENAL CELL CARCINOMA

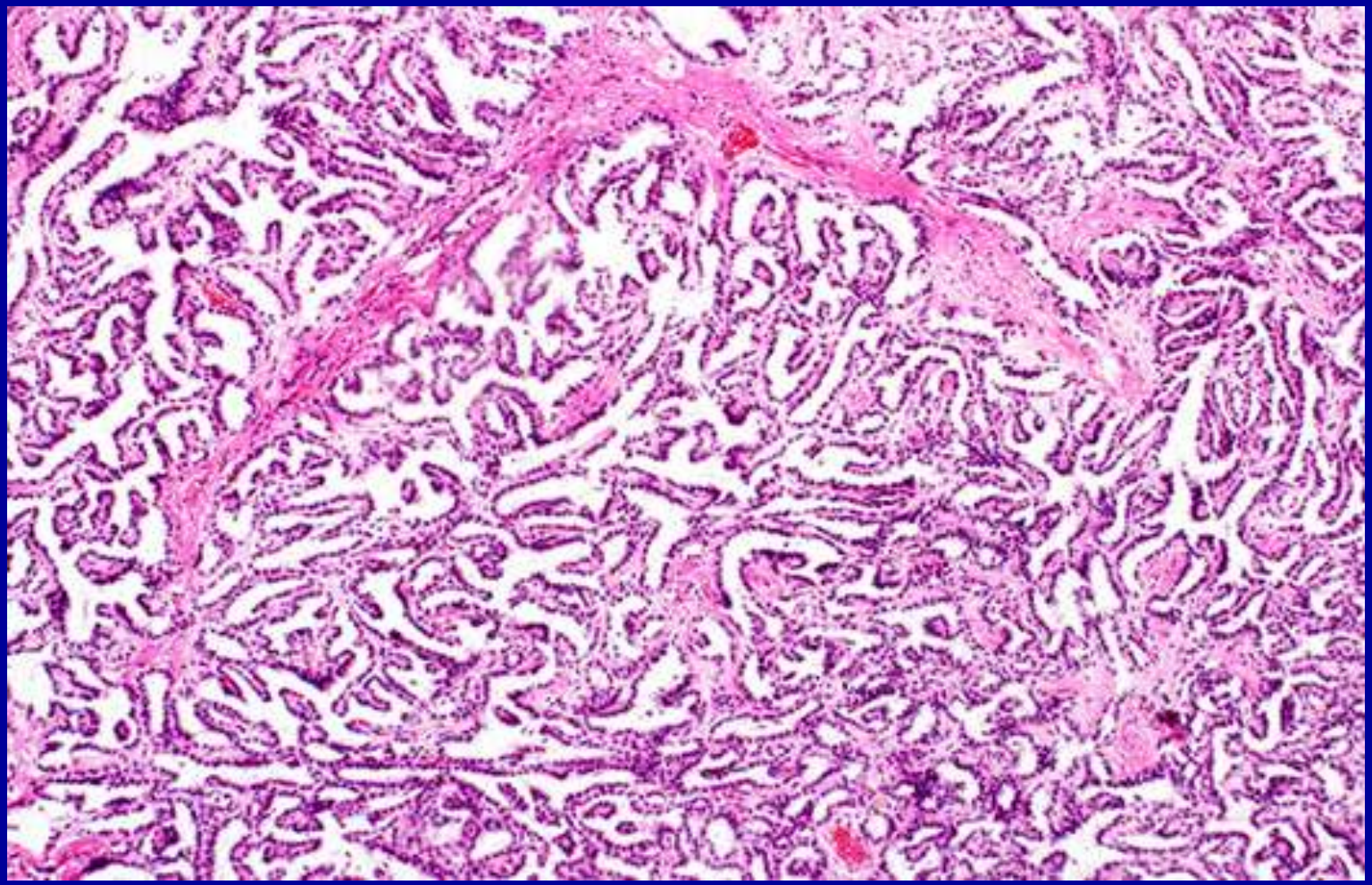
STAGE GROUPING

– Stage I	T1	N0	M0
– Stage II	T2	N0	M0
– Stage III	T3	N0	M0
–	T1, T2, T3	N1	M0
– Stage IV	T4	N0, N1	M0
–	T4b	N0	M0
–	Any T	N2	M0
–	Any T	Any N	M1

Notes: a Includes renal sinus (peripelvic) fat
b Includes segmental (muscle-containing) branches

TUMORI BUBREGA

- PAPILARNI ADENOM

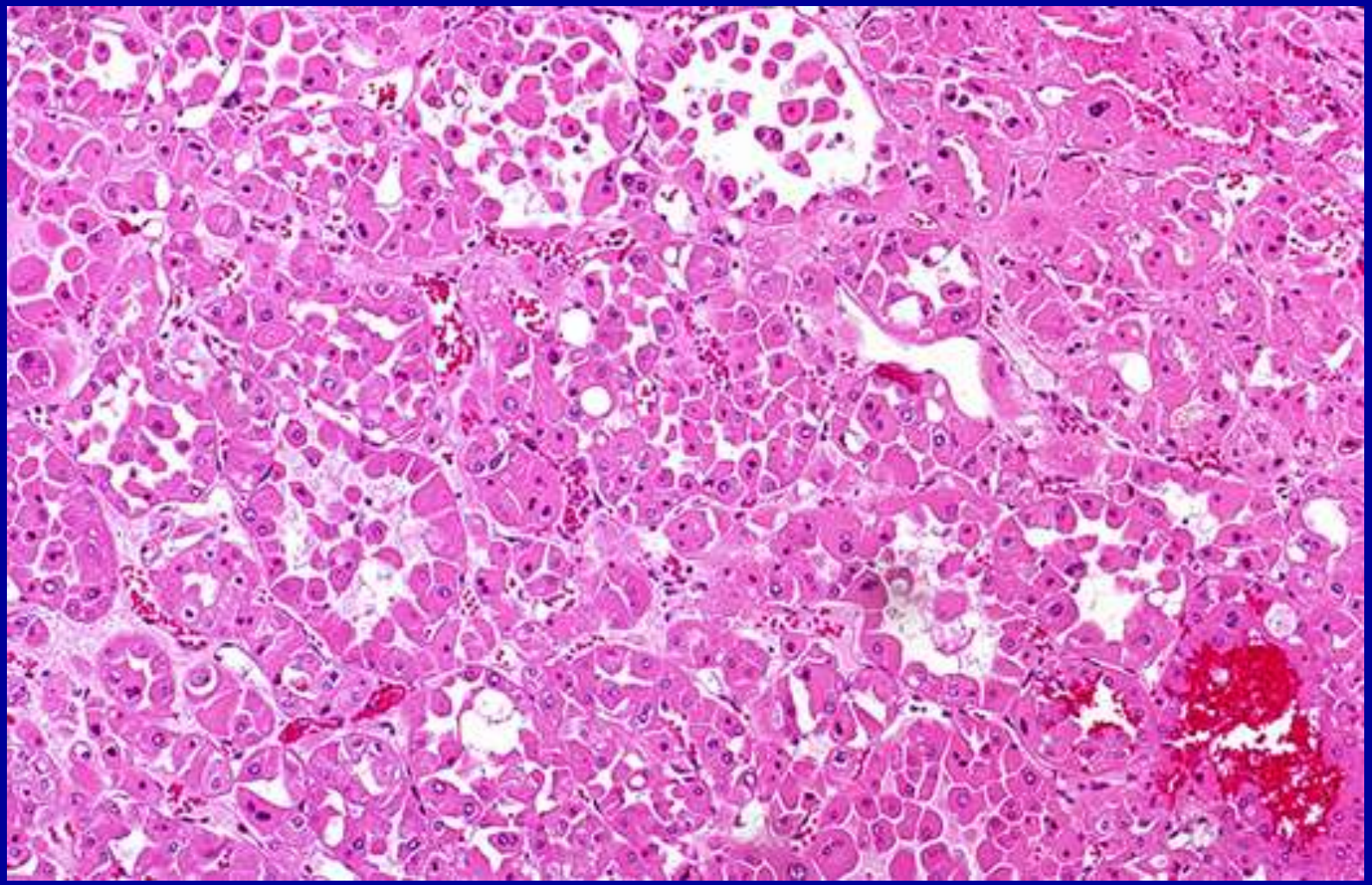


TUMORI BUBREGA

- ONCOCYTIC ADENOMA- ONCOCYTOMA

TUMORI BUBREGA

- ONCOCYTIC ADENOMA- ONCOCYTOMA



MALIGNI TUMORI BUBREGA

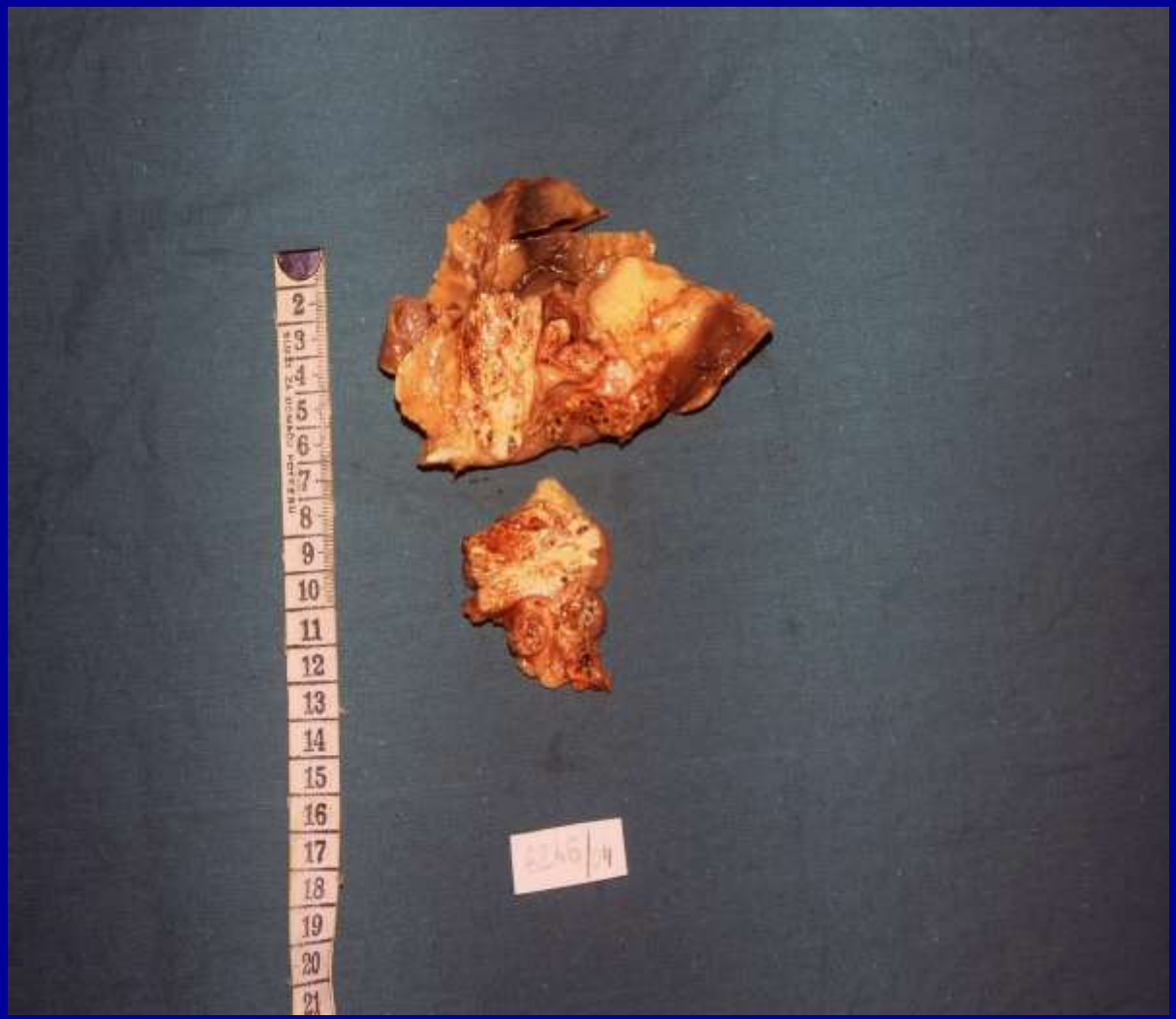
RENAL CELL CARCINOMA RCC

Klasifikuju se kao :

- clear cell (konvencionalni) -svetloceliijski ili hromofobni celijski tip
- papilarni
- neklasifikovani
  - mucinozno-tubularni
  - spindle cell carcinoma
  - Bellini duct (collecting duct) iako su duktusi mezonefrickog porekla

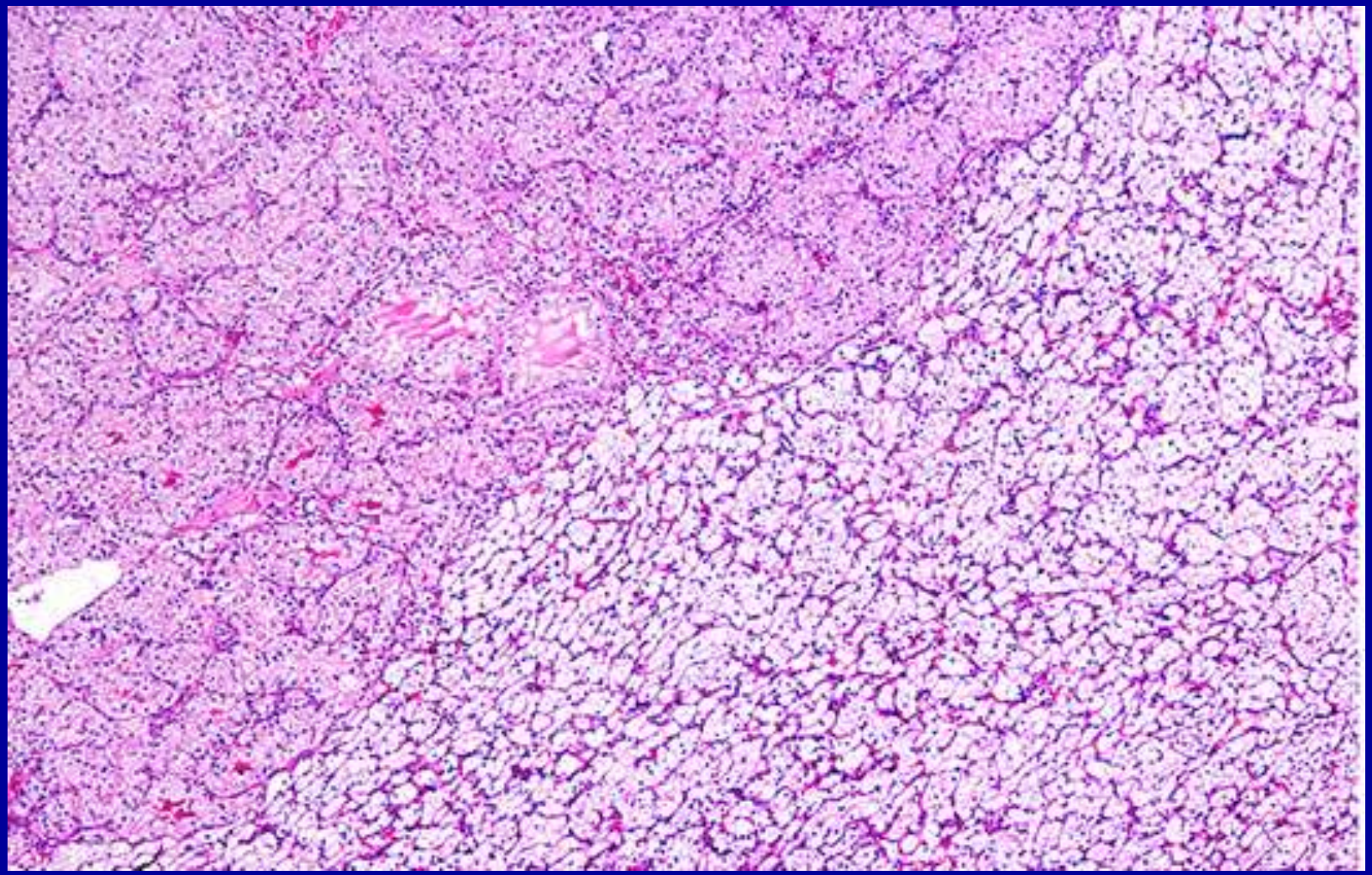
MALIGNI TUMORI BUBREGA

- CLEAR CELL TYPE



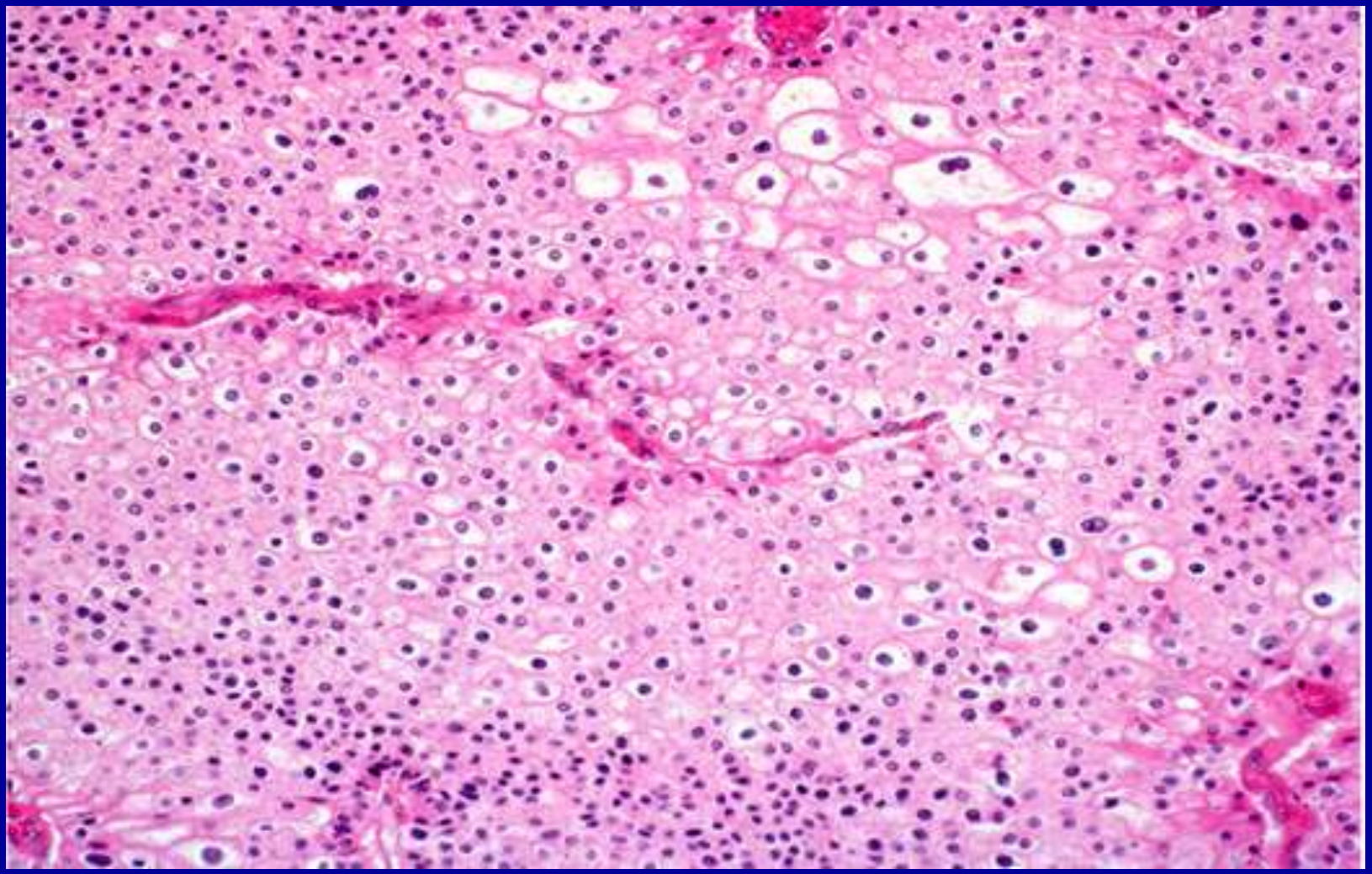
MALIGNI TUMORI BUBREGA

- CLEAR CELL TYPE



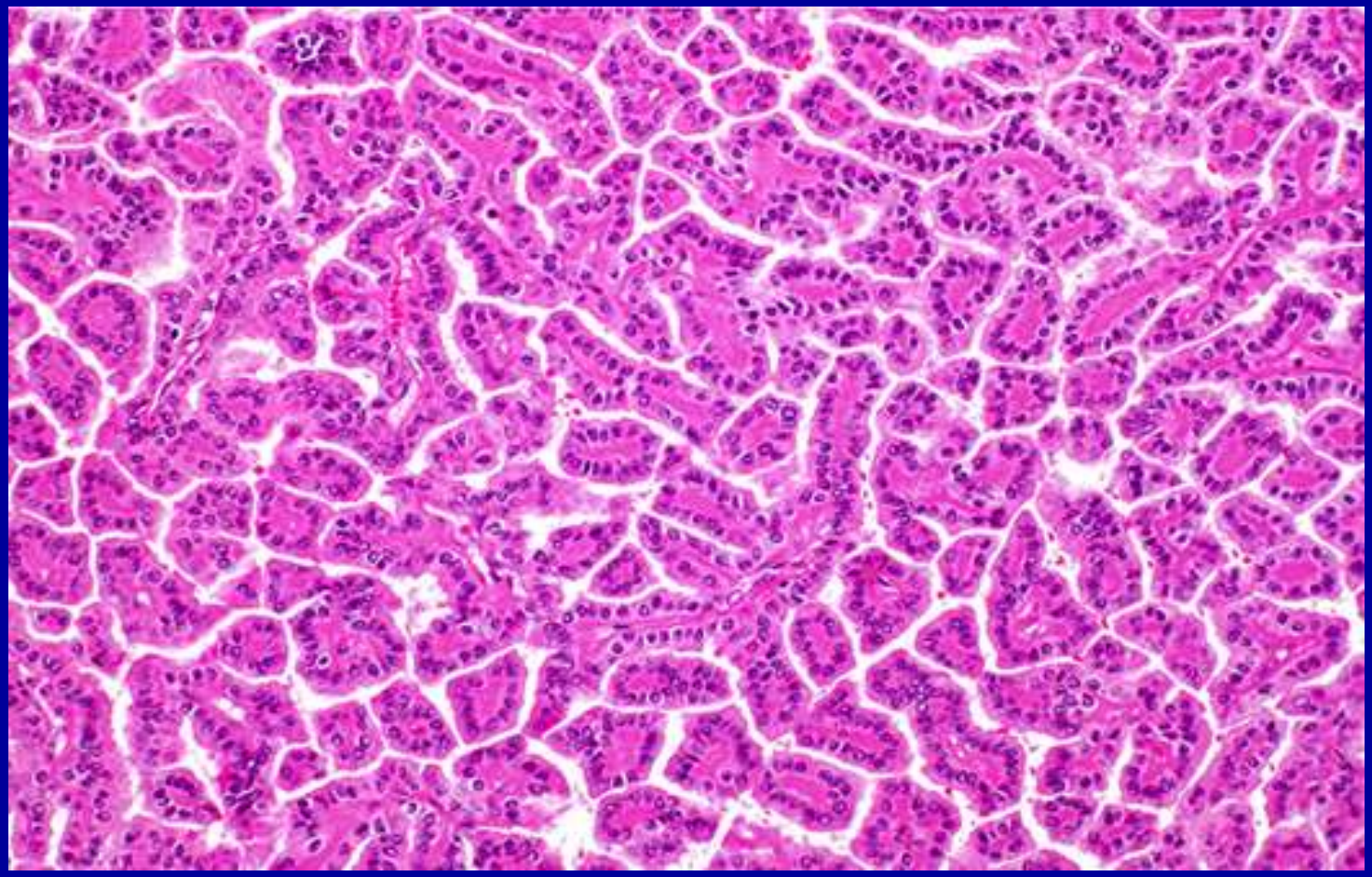
MALIGNI TUMORI BUBREGA

- HROMOFOBNI CELIJSKI TIP



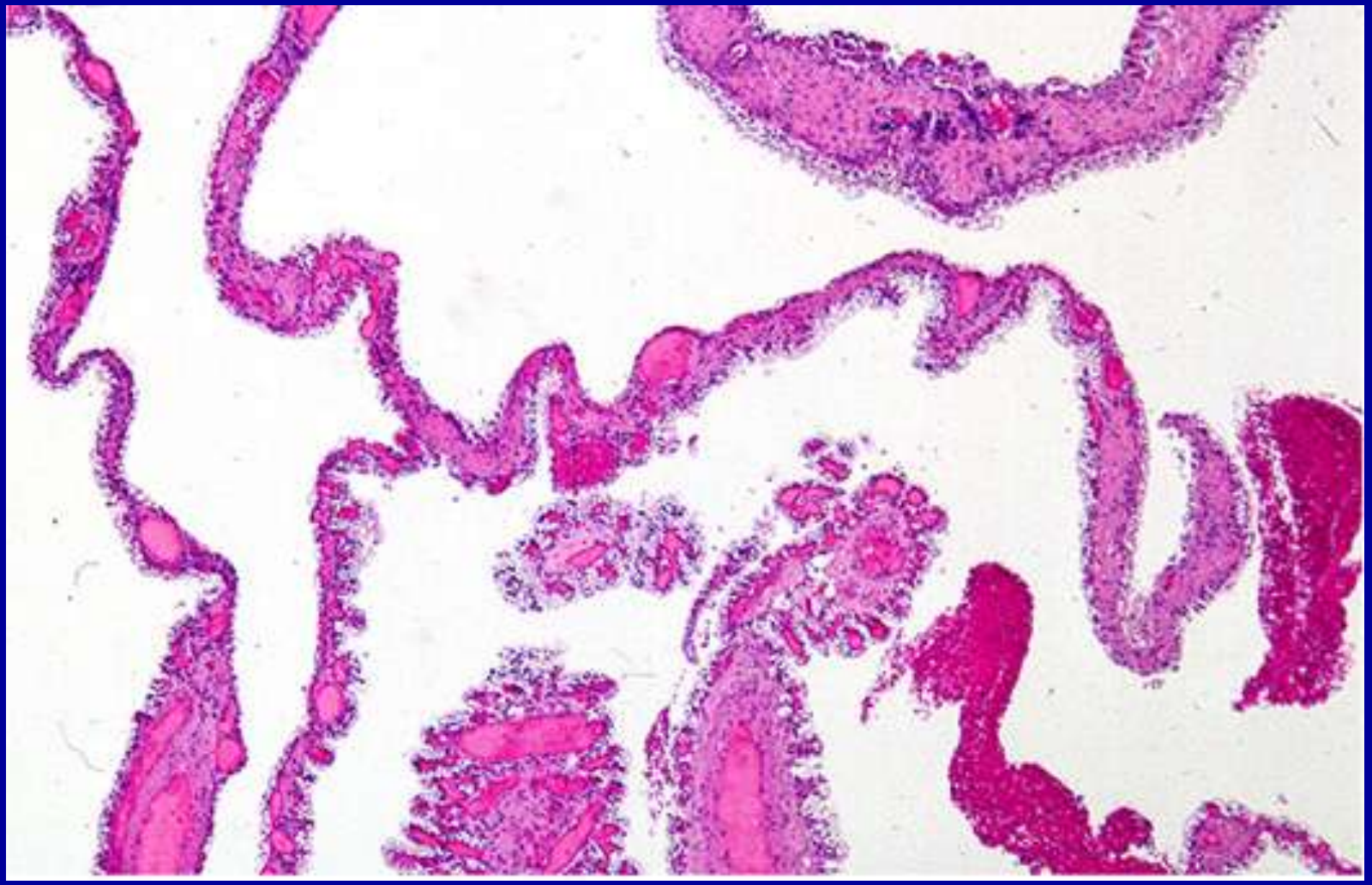
MALIGNI TUMORI BUBREGA

- Papilarni RC- vise varijanti-tip 1. papile ili tubuli oblozeni jednim redom celija



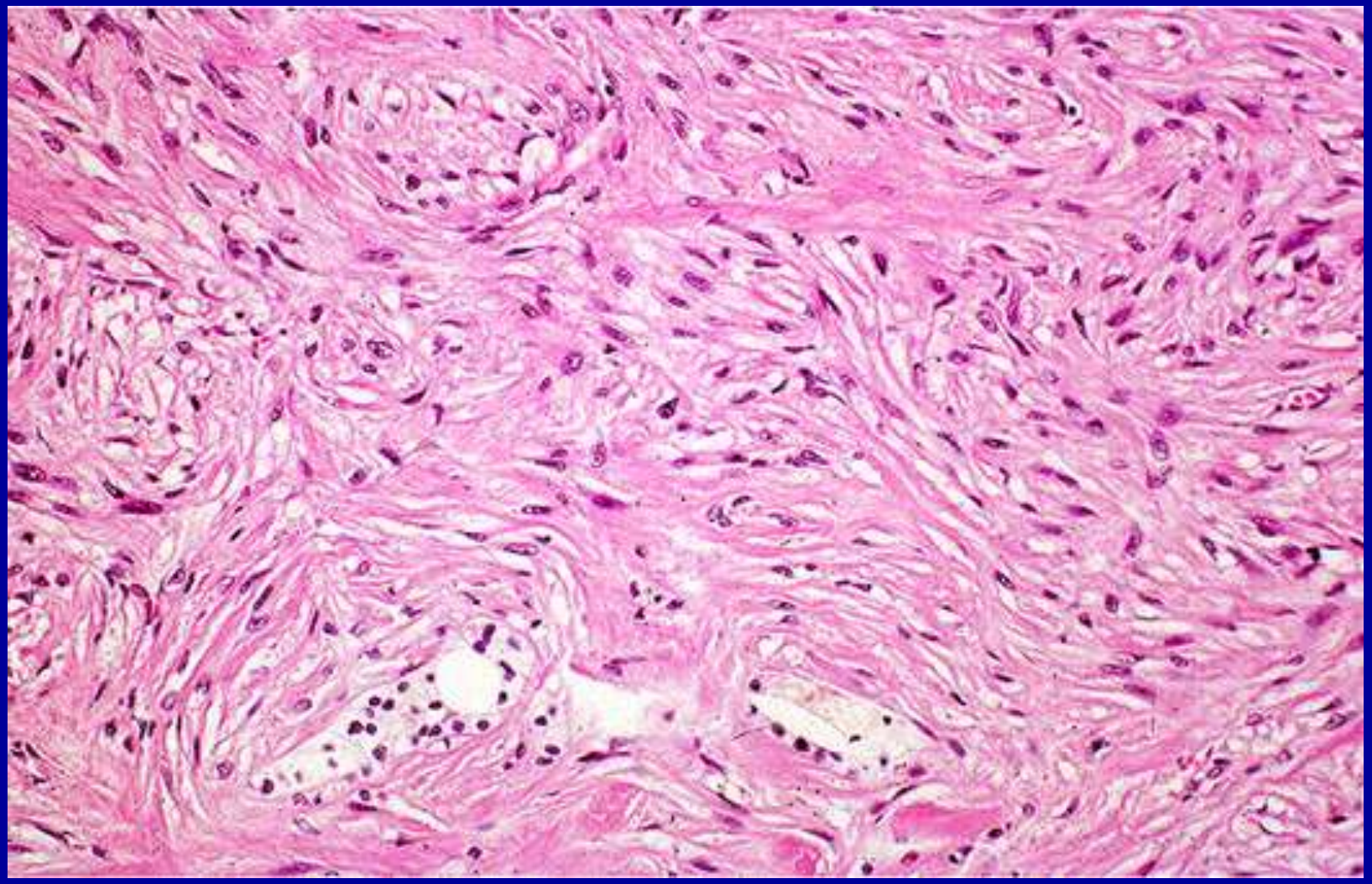
MALIGNI TUMORI BUBREGA

- CISTIČNI (MULTILOKULARNI) RCC



MALIGNI TUMORI BUBREGA

RCC, SPINDLE CELL ILI SARKOMATOIDNI TIP



MALIGNI TUMORI BUBREGA

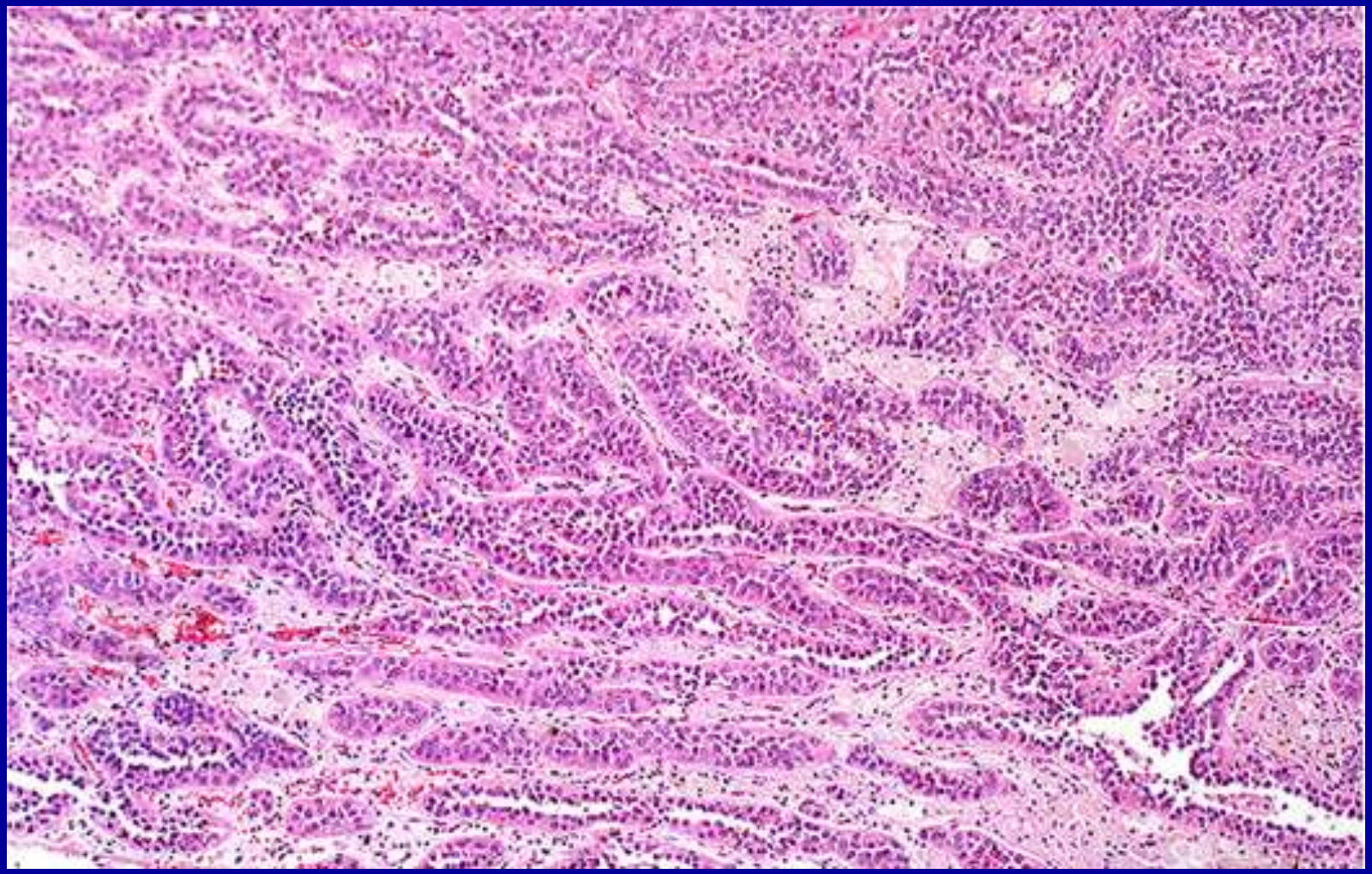
- Translocation carcinoma
  - transcription factor gen TFE3
  - nested ili tubulopapilarna, sa mnogo clear cell eozinofilne citoplazme i psamoma body. Preklapanje sa ostalim tipovima
  - EMA -+, CAM5. 2-+, vimentim -+
  - Kod svetlocelijskih lezija osoba ispod 25g (Am. J. Surg. Pathol, 2005)

MALIGNI TUMORI BUBREGA

- RCC neklasifikovani
  - 4-5% svih RCC-ne moze se svrstati ni u jednu kategoriju

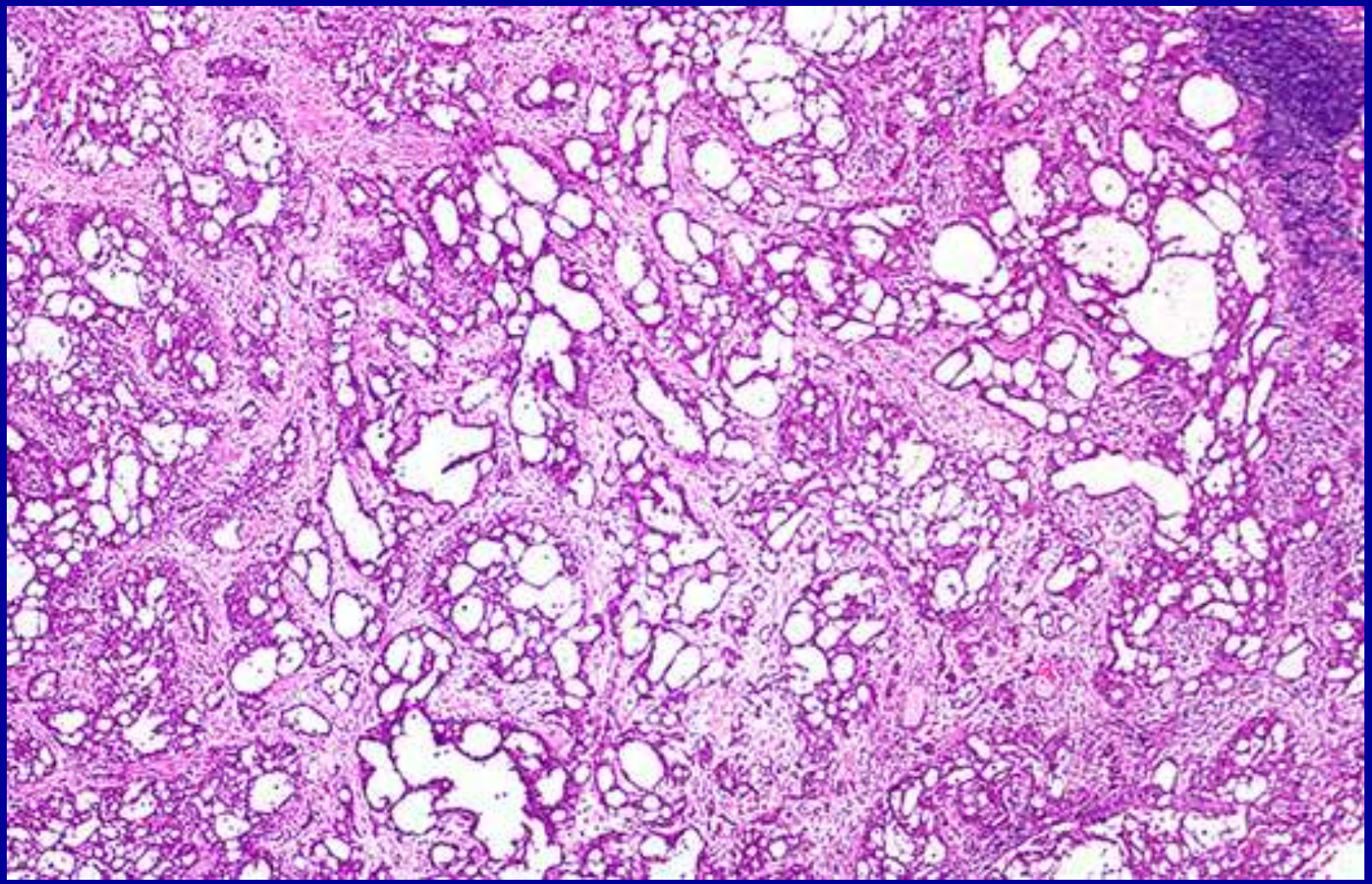
MALIGNI TUMORI BUBREGA

COLLECTING DUCT CARCINOMAS



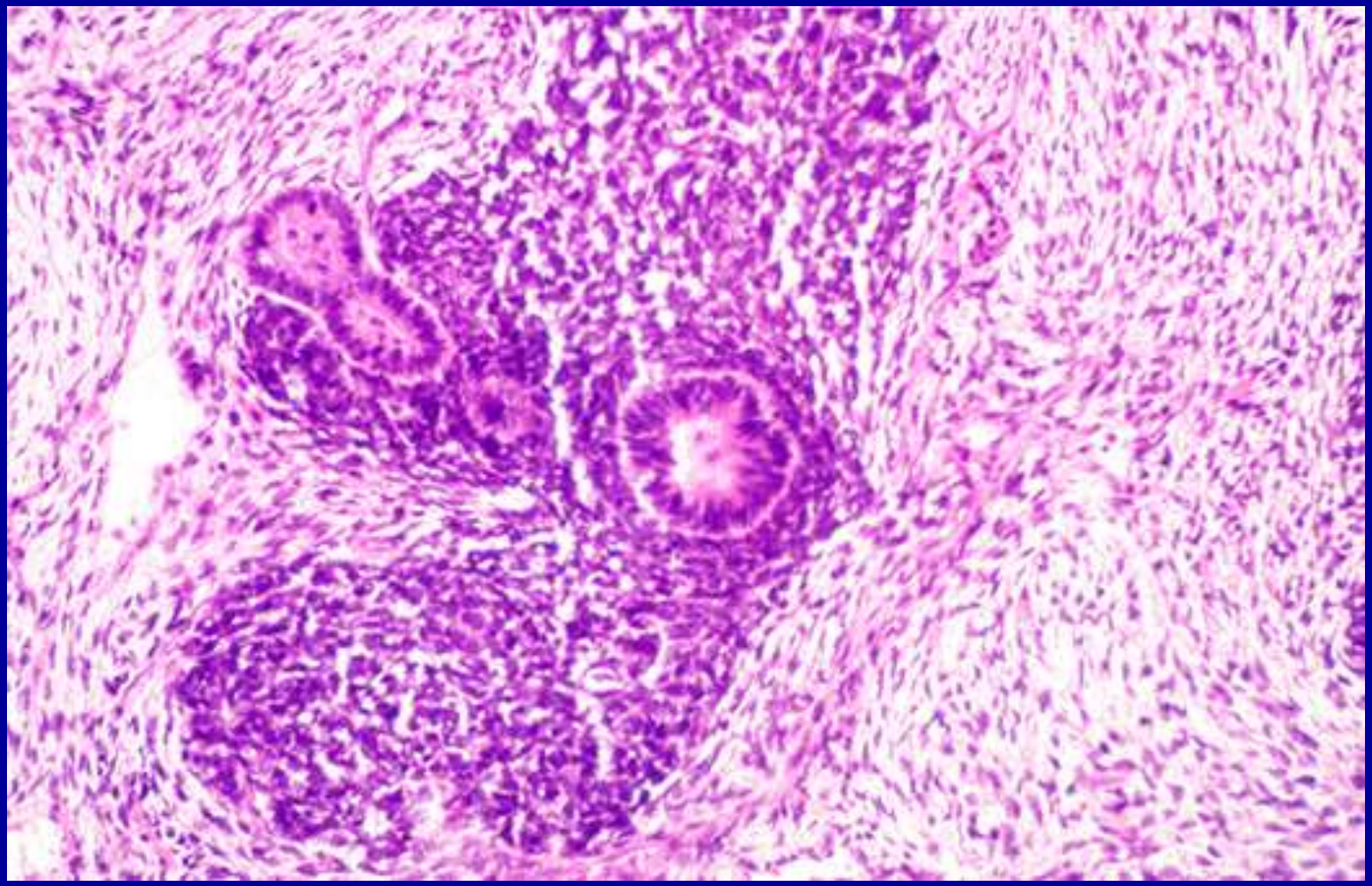
MALIGNI TUMORI BUBREGA

REENAL MEDULLARY CARCINOMA



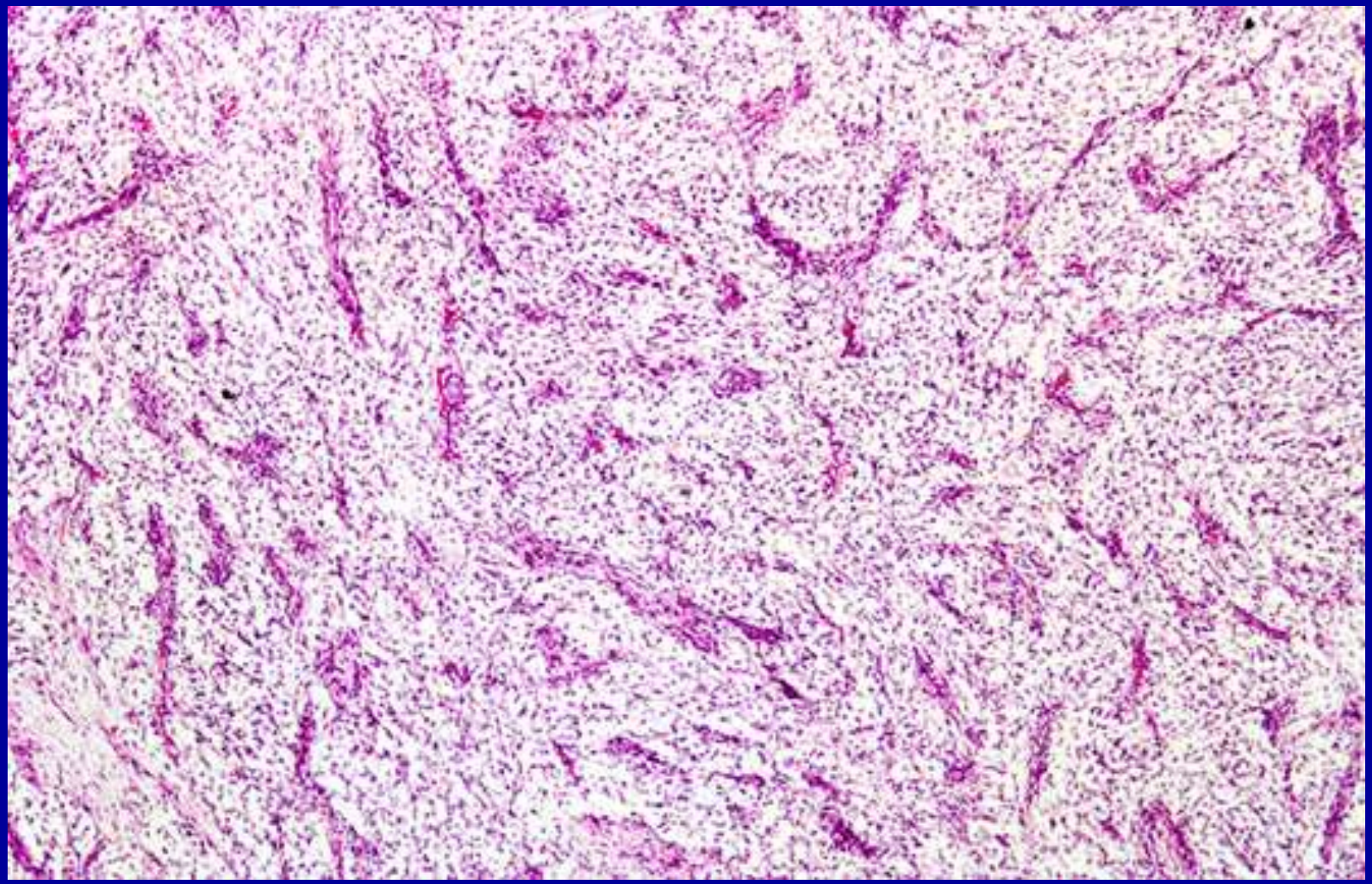
MALIGNI TUMORI BUBREGA

NEPHROBLASTOMA- WILMS TUMOR



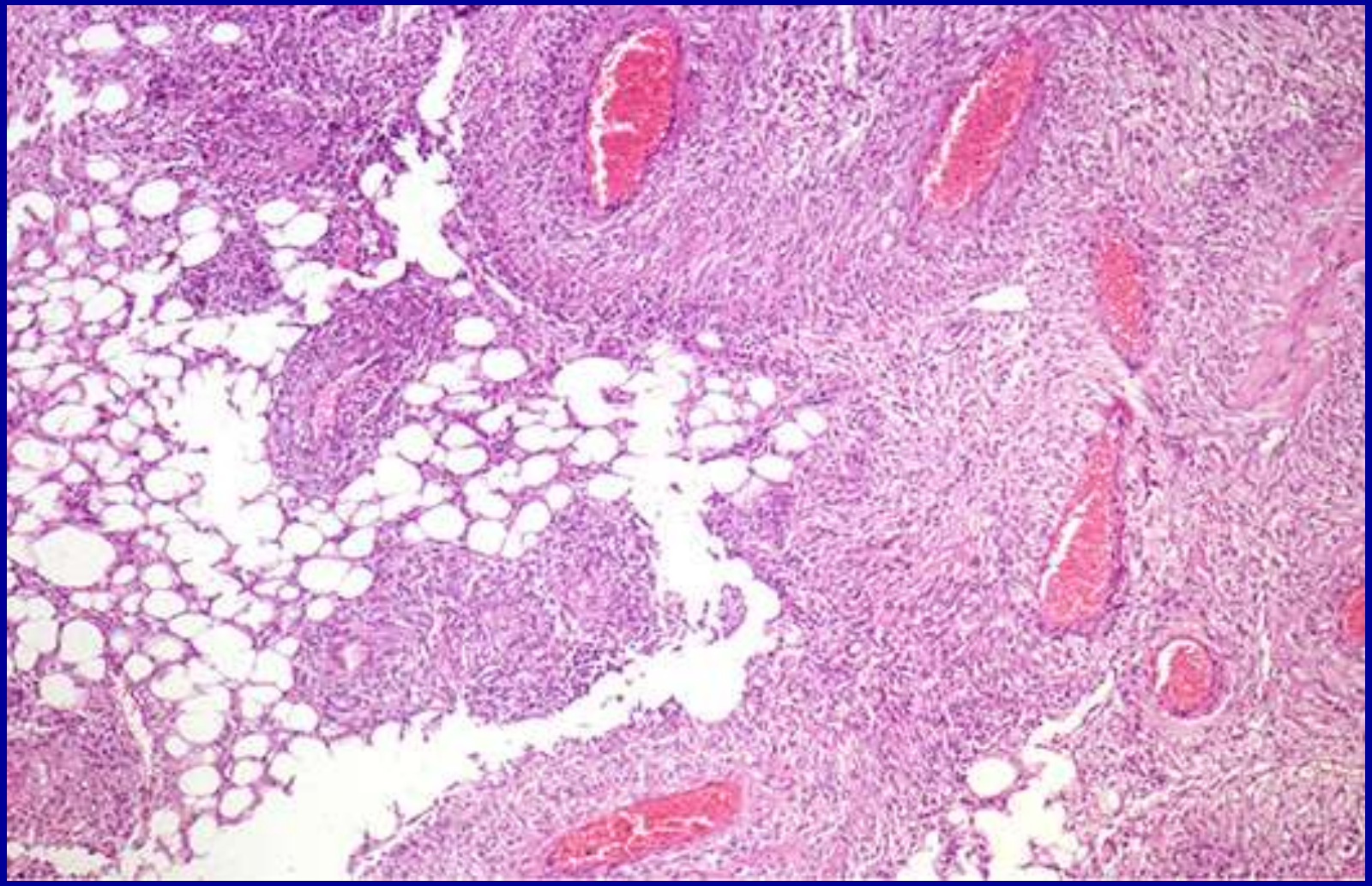
MALIGNI TUMORI BUBREGA

CLEAR CELL SARCOMA



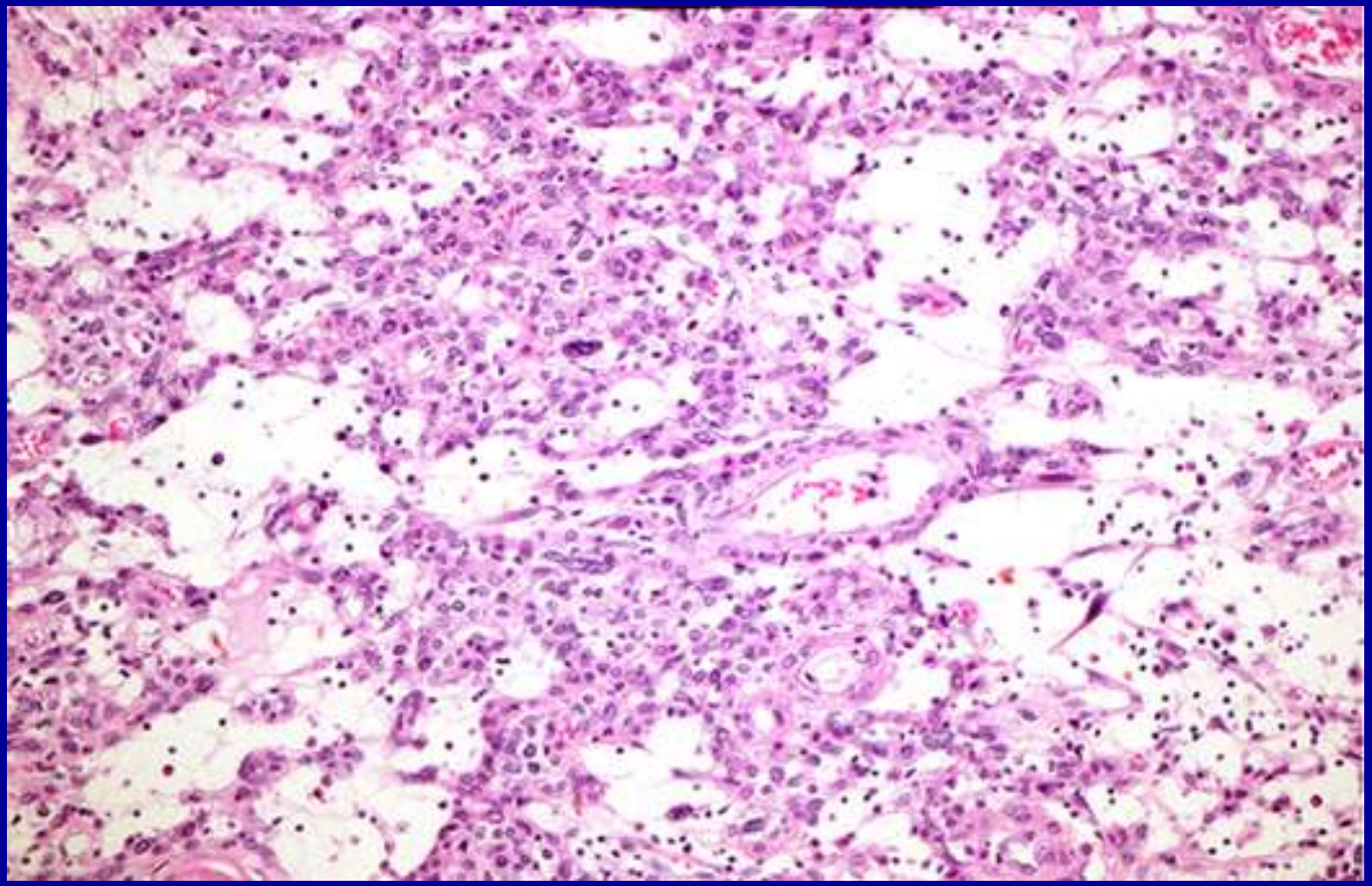
TUMORI BUBREGA

ANGIOMIOLIPOM



MALIGNI TUMORI BUBREGA

JUKSTAGLOMERULAR CELL TUMOR (JGC)



CISTIČNE BOLESTI BUBREGA

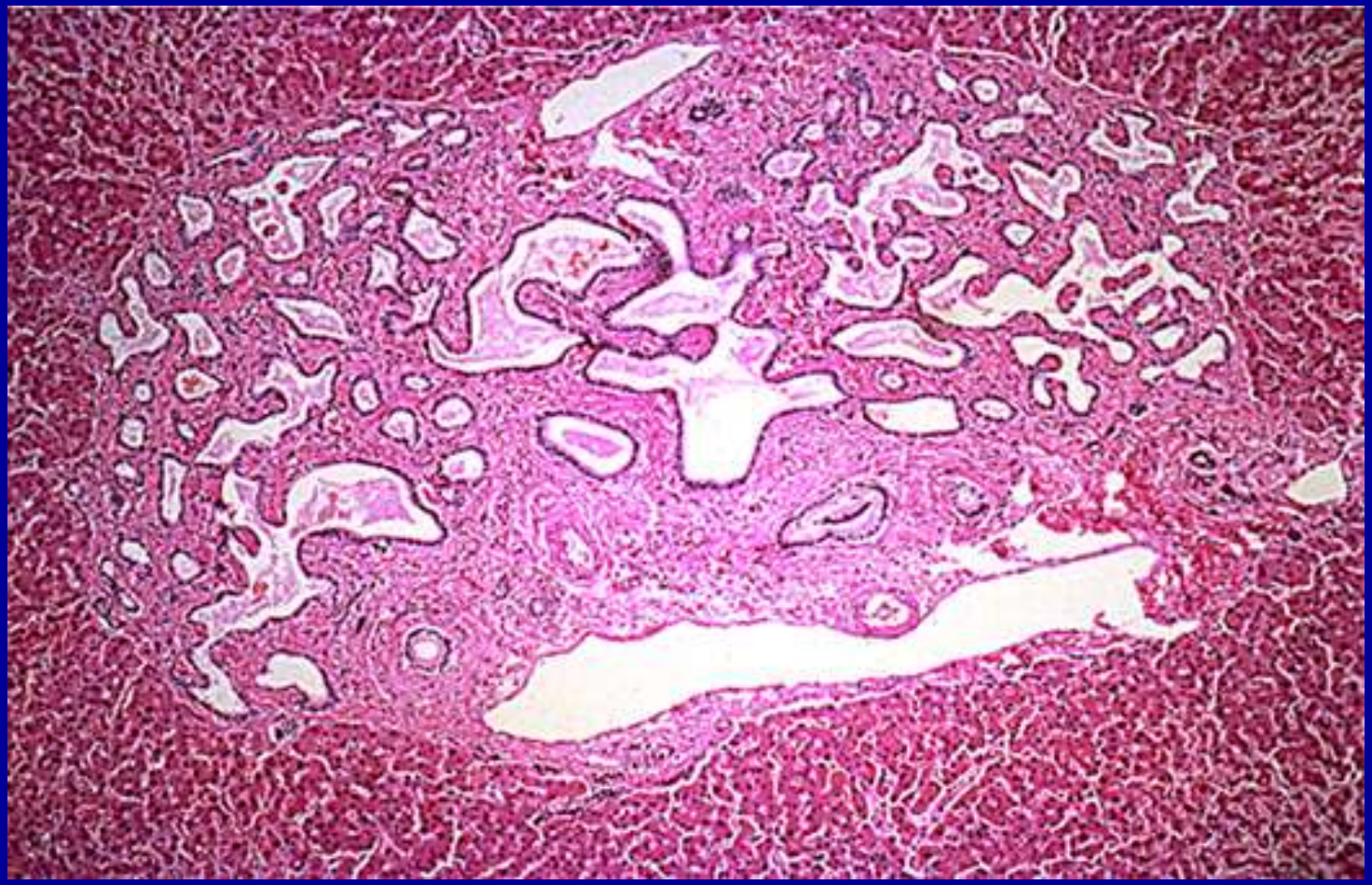
- CISTIČNE BOLESTI I DISPLAZIJA BUBREGA
  - nasledne cistične bolesti bubrega
  - proste ciste i segmentna cistična bolest bubrega
  - stečena cistična bolest bubrega
  - medularni spongiozni buburezi
  - medularna cistična bolest-nefronoftiza
  - renalna displazija
  - renalna tubularna disgenezija

CISTIČNE BOLESTI BUBREGA

AUTOZOMALNA DOMINANTNA POLICISTIČNA BOLEST

CISTIČNE BOLESTI BUBREGA

AUTOZOMALNA DOMINANTNA POLICISTIČNA BOLEST

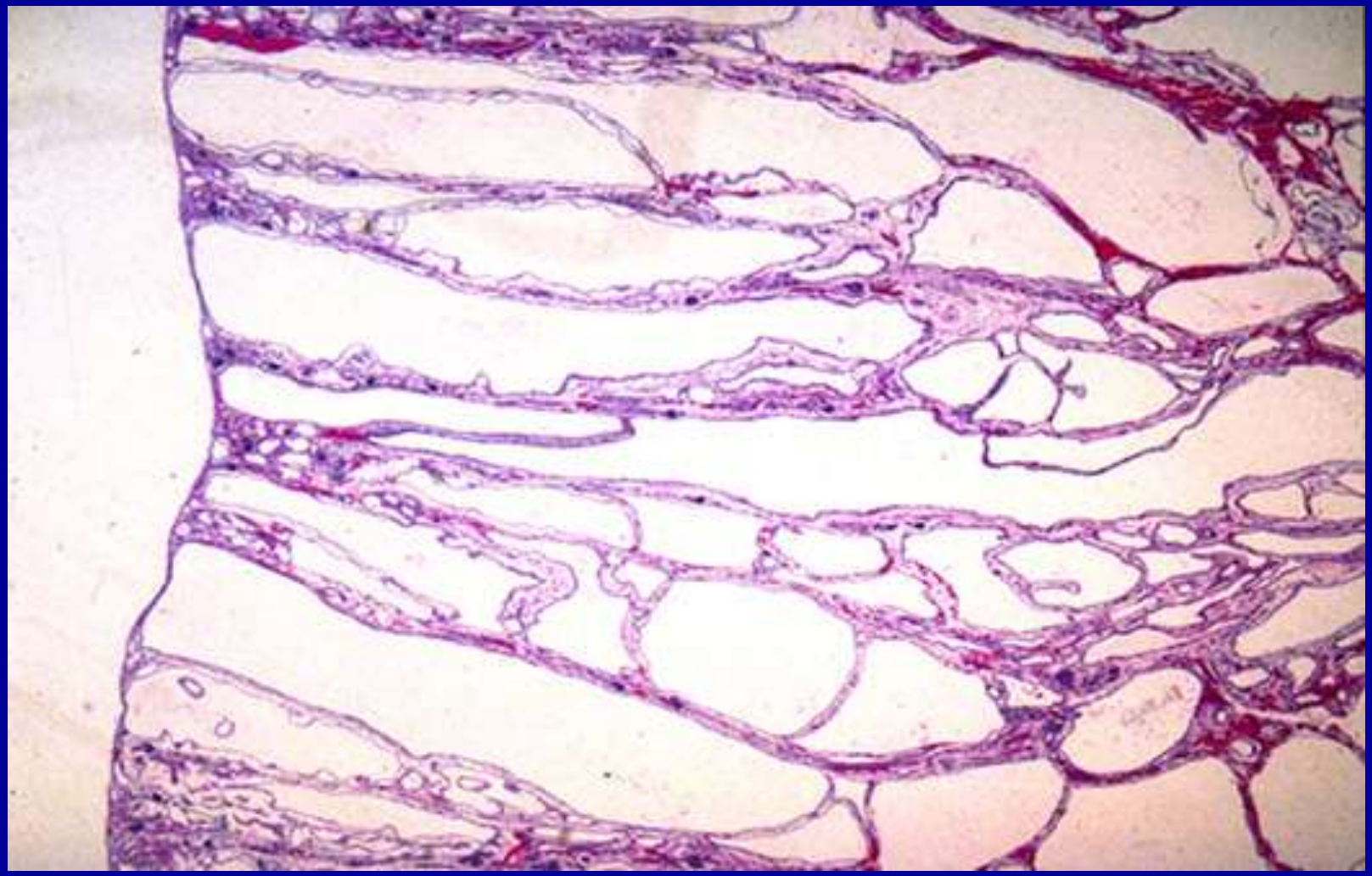


CISTIČNE BOLESTI BUBREGA

INFANTILE POLYCYSTIC DISEASE

CISTIČNE BOLESTI BUBREGA

INFANTILE POLYCYSTIC DISEASE



PATOLOGIJA ADRENALNIH ŽLJEZDA

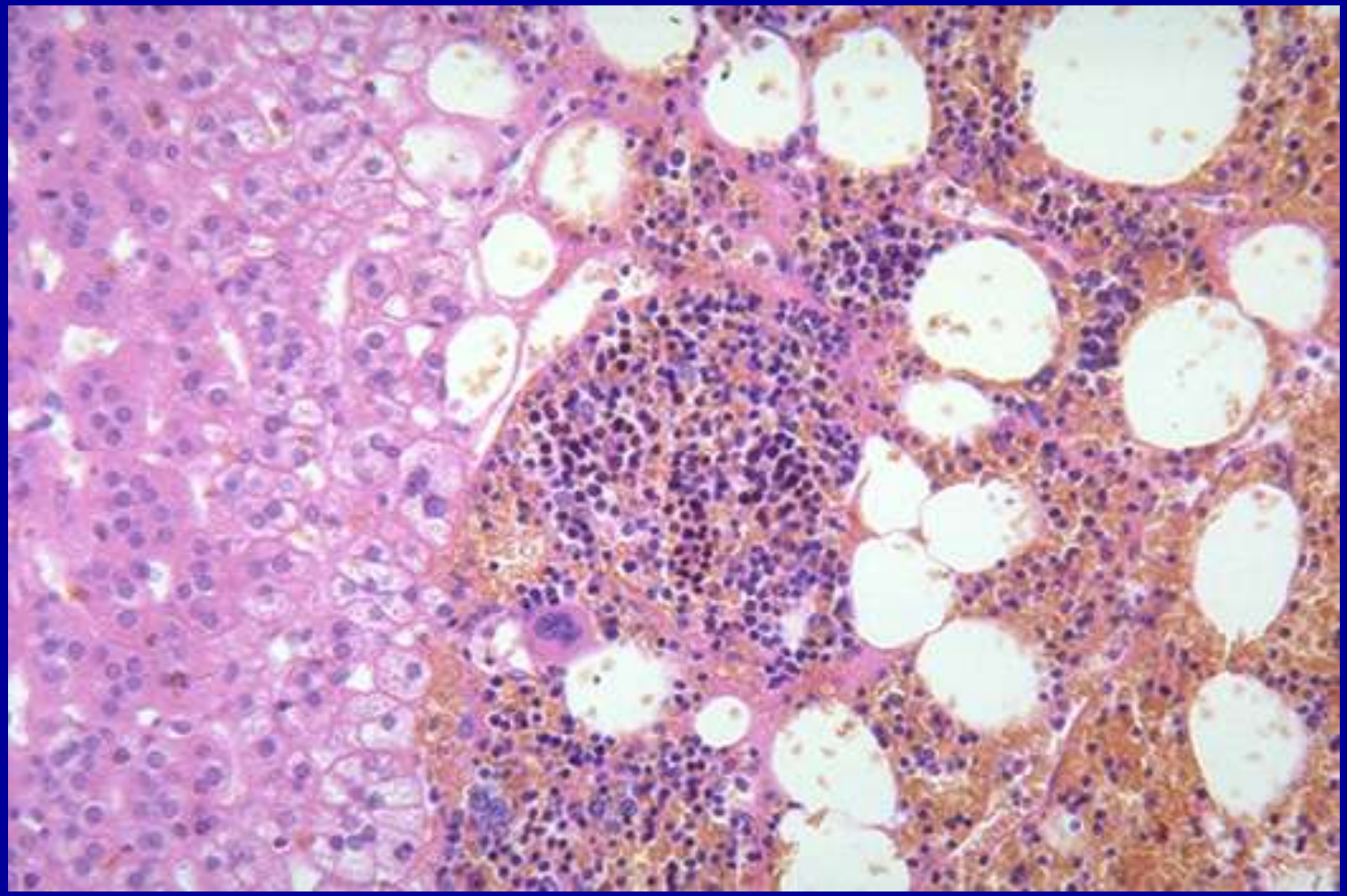
- Adrenalni korteks
  - Nastaje iz mezoderma. Na rodjenju celije pocinju da atrofiraju i zamenjene su definitivnim korteksom. U 4. mesecu zivota fetalna zona 90% atroficna.
  - Tri zine-glomeruloza, fascikulata i retikularis. Produkuju hormone-aldosteron, kortizol, andogene, estrogen.
  - Razvojne anomalije
    - atrofija
    - ektopija

PATOLOGIJA ADRENALNIH ŽLJEZDA

PROMENE-MYELOLIPOMA

PATOLOGIJA ADRENALNIH ŽLJEZDA

PROMENE-MYELOLIPOMA

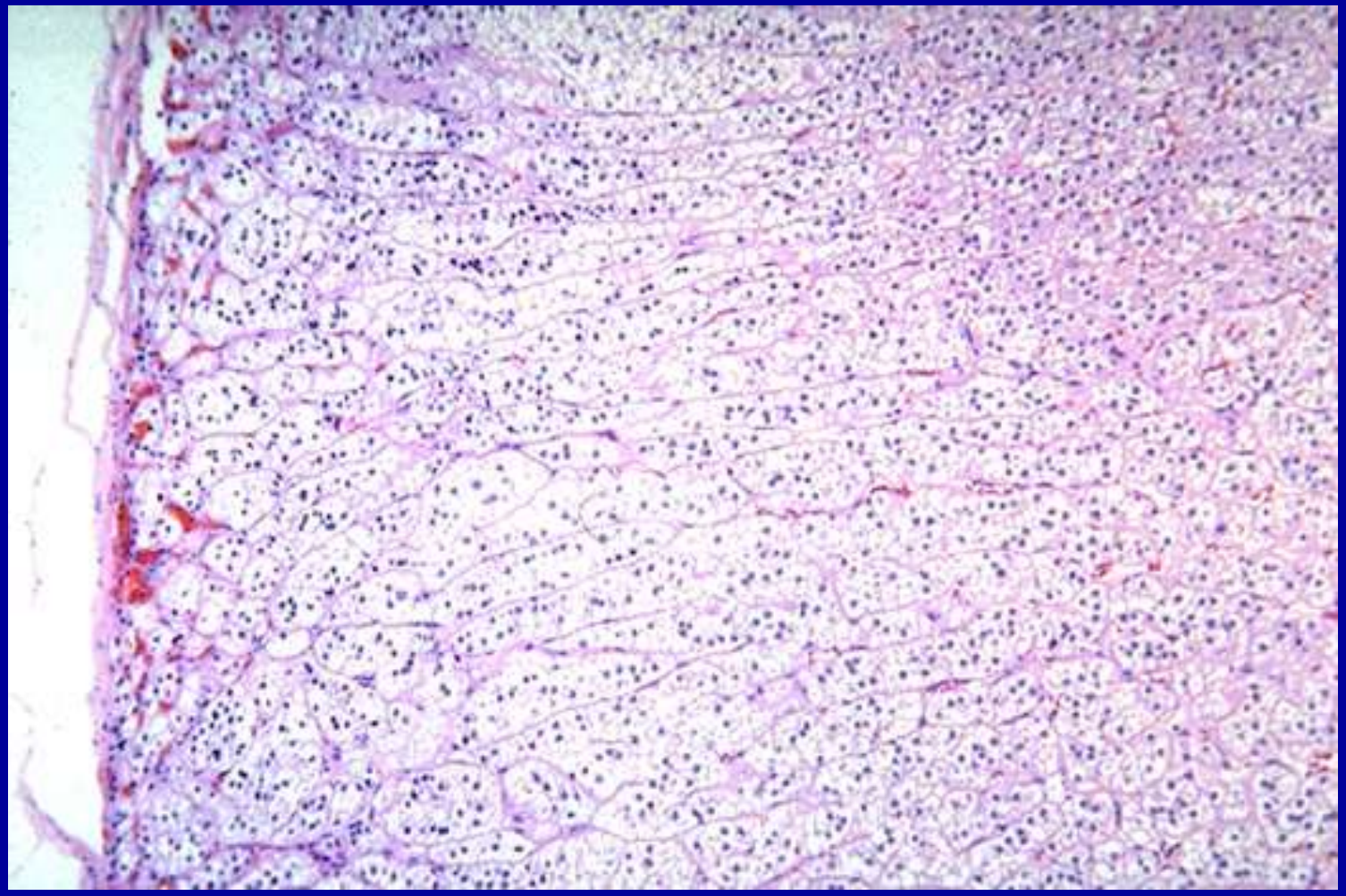


PATOLOGIJA ADRENALNIH ŽLJEZDA

HIPEPRLAZIJA

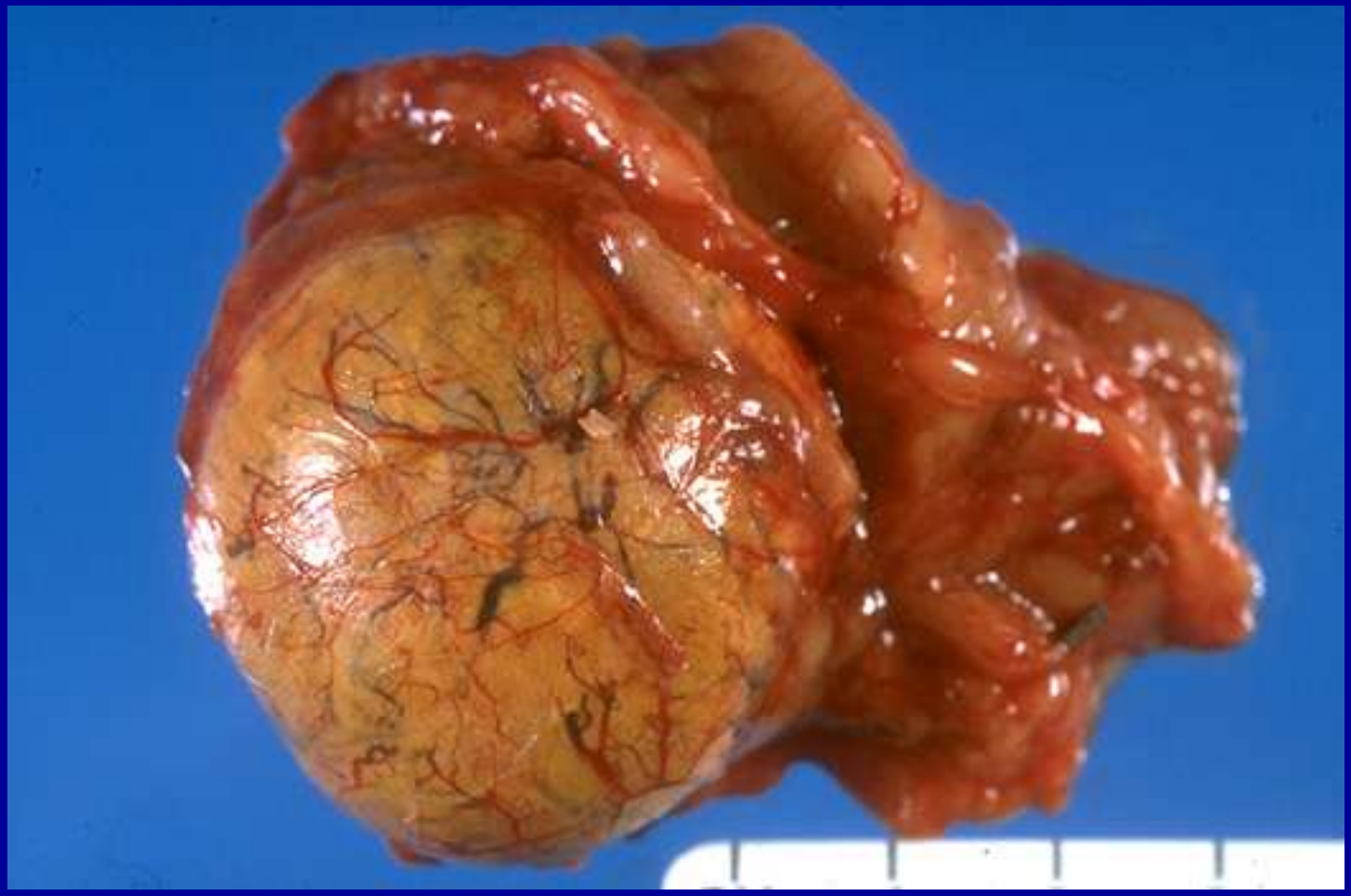
PATOLOGIJA ADRENALNIH ŽLJEZDA

HIPEPRLAZIJA



NEOPLAZIJE ADRENALNIH ŽLJEZDA

ADENOMA



NEOPLAZIJE ADRENALNIH ŽLJEZDA

KARCINOM KORE NADBUBREGA

NEOPLAZIJE ADRENALNIH ŽLJEZDA

ADENOMA

NEOPLAZIJE ADRENALNIH ŽLJEZDA

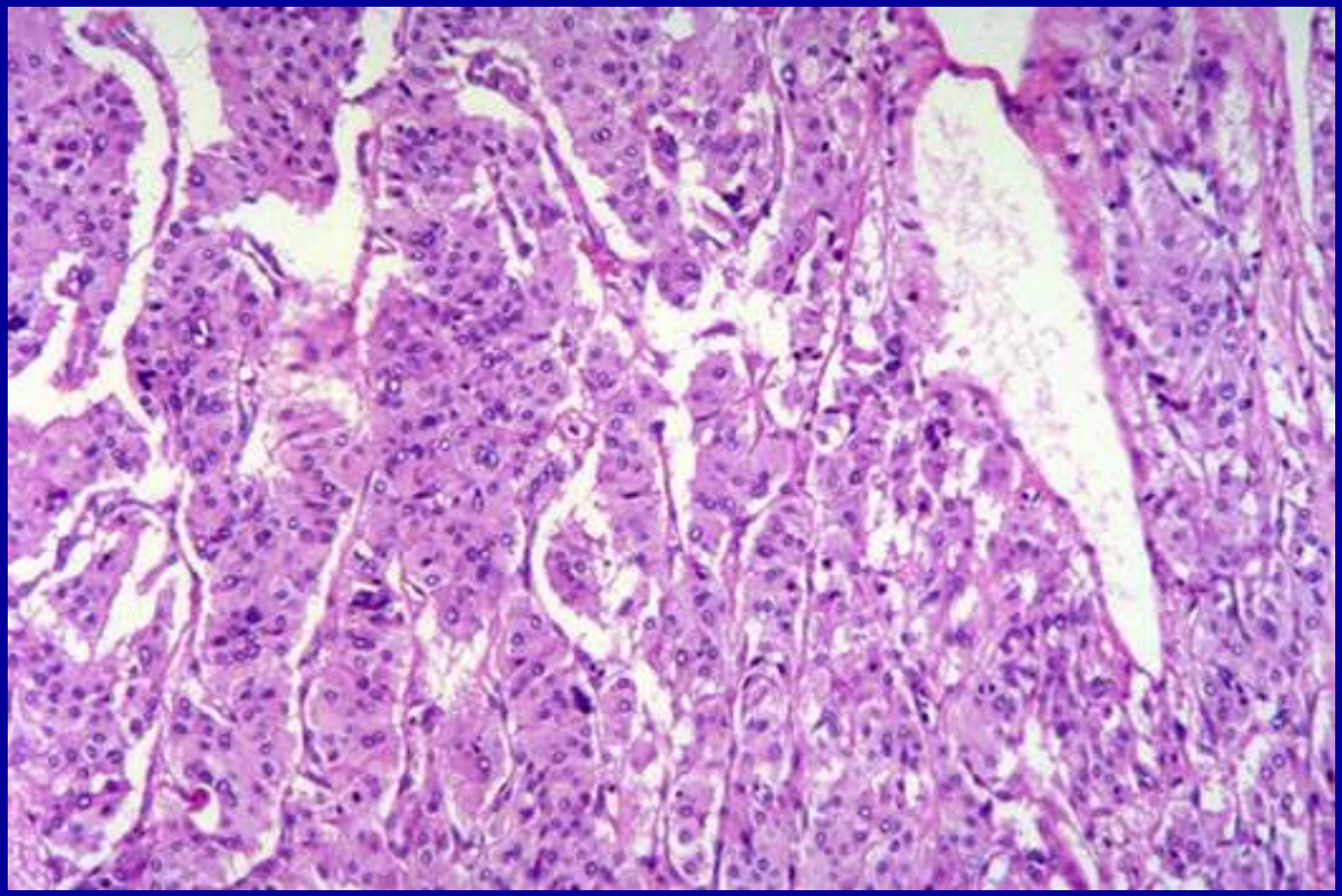
ALDOSTERONOMA

NEOPLAZIJE ADRENALNIH ŽLJEZDA

FEOHROMOCITOM

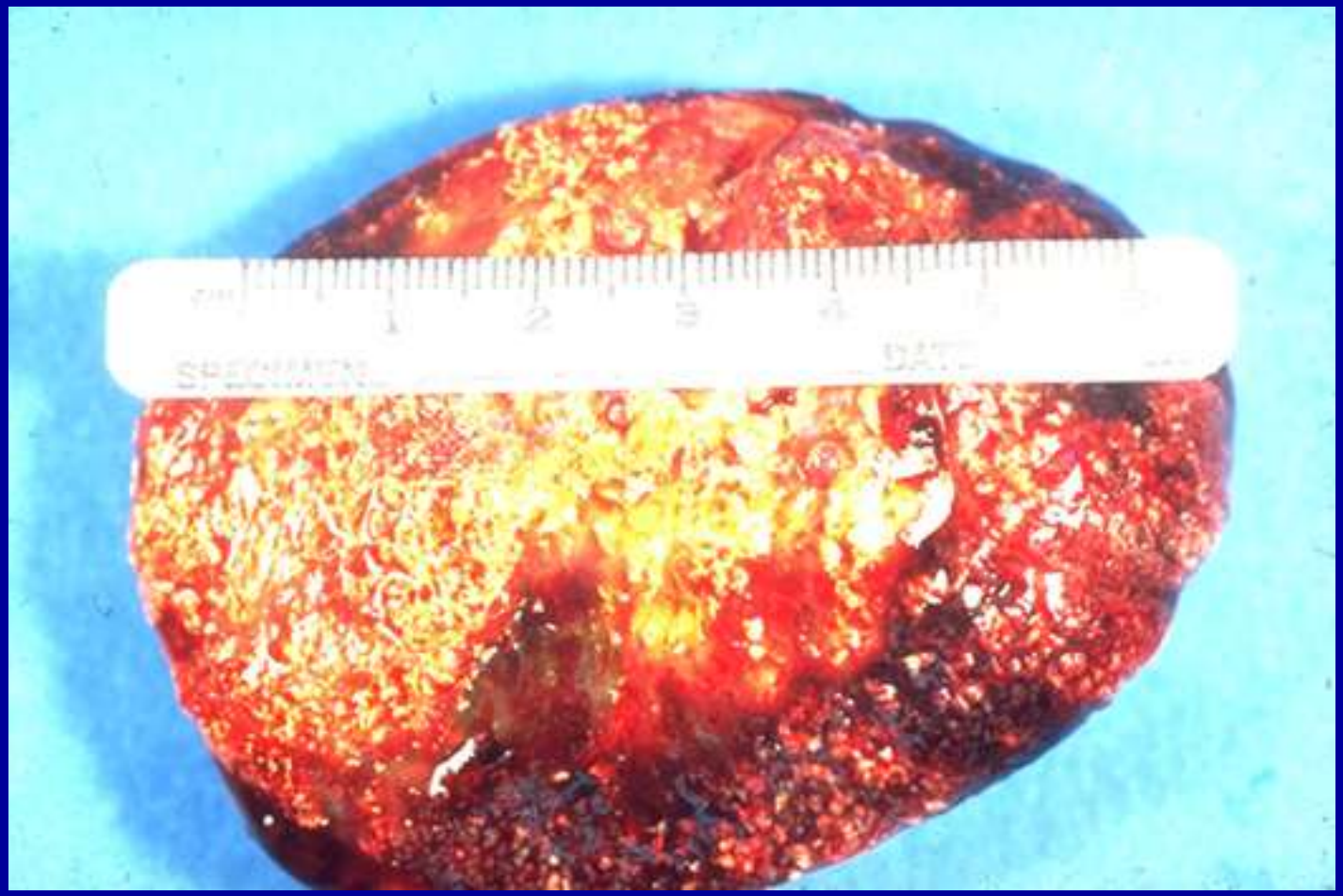
NEOPLAZIJE ADRENALNIH ŽLJEZDA

FEOHROMOCITOM



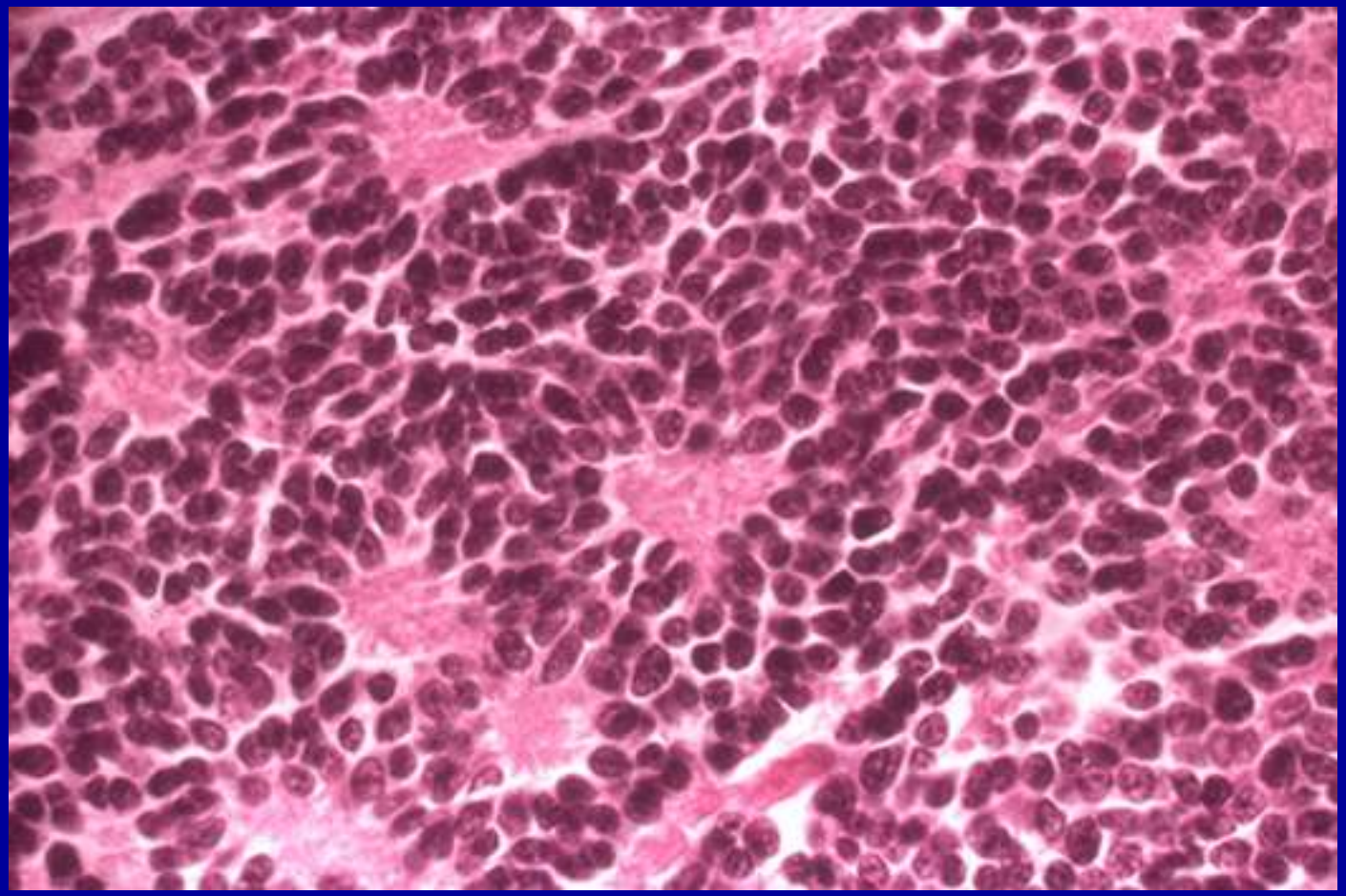
NEOPLAZIJE ADRENALNIH ŽLJEZDA

NEUROBLASTOMA



NEOPLAZIJE ADRENALNIH ŽLJEZDA

NEUROBLASTOMA



NEOPLAZIJE ADRENALNIH ŽLJEZDA

LEIOMYOSARCOMA INFILTRISE NADBUBREG

PATOLOGIJA MOKRAĆNE BEŠIKE

PATOLOGIJA MOKRAĆNE BEŠIKE

- KONGENITALNE ANOMALIJE
- INFLAMACIJE I INFEKCIJE
- METAPLAZIJA
- NEOPLAZIJE
- NENEOPLASTIČNA TUMORSKA STANJA
- OSTALE PROMENE

PATOLOGIJA MOKRAĆNE BEŠIKE

KONGENITALNE ANOMALIJE

- EKSTROFIJA
- DIVERTIKULI
- AGENEZIJA
- DRUGE KONG. ANOMALIJE
- URAHALNI PORMECAJI

PATOLOGIJA MOKRAĆNE BEŠIKE

INFLAMACIJA I INFEKCIJE

- Brunn ognjista
- cistitis
- pseudosarkomatozni fibromiksoidni tumor (inflamatorni pseudotumor i postoperativni spindle cell nodul)
- malakoplakija

PATOLOGIJA MOKRAĆNE BEŠIKE

INFLAMACIJA I INFEKCIJE

- ksantogranulomatozna inflamacija
- intersticijalni cistitis
- infekcije-bakterije, gljivice, virusi, paraziti
- hemijski cistitis
- imunoloski poremecaji
- lichen planus

PATOLOGIJA MOKRAĆNE BEŠIKE

METAPLAZIJA

- skvamozna
- intestinalna
- nefrogena

TNM CLASSIFICATION OF CARCINOMAS OF THE URINARY BLADDER

T Primary tumour

- TX Primary tumour cannot be assessed
- T0 No evidence of primary tumour
- Ta Non-invasive papillary carcinoma
- Tis Carcinoma in situ: “flat tumour”
- T1 Tumour invades subepithelial connective tissue
- T2 Tumour invades muscle
- T2a Tumour invades superficial muscle (inner half)

TNM CLASSIFICATION OF CARCINOMAS OF THE URINARY BLADDER

T Primary tumour

- T2b Tumour invades deep muscle (outer half)
- T3 Tumour invades perivesical tissue:
- T3a Microscopically
- T3b Macroscopically (extravesical mass)
- T4 Tumour invades any of the following: prostate, uterus, vagina, pelvic wall, abdmonal wall
- T4a Tumour invades prostate, uterus or vagina
- T4b Tumour invades pelvic wall or abdominal wall

TNM CLASSIFICATION OF CARCINOMAS OF THE URINARY BLADDER

N Regional lymph nodes

- NX Regional lymph nodes cannot be assessed
- N0 No regional lymph node metastasis
- N1 Metastasis in a single lymph node 2 cm or less in greatest dimension
- N2 Metastasis in a single lymph node more than 2 cm but not more than 5 cm in greatest dimension, or multiple lymph nodes, none more than 5 cm in greatest dimension
- N3 Metastasis in a lymph node more than 5 cm in greatest dimension

TNM CLASSIFICATION OF CARCINOMAS OF THE URINARY BLADDER

M Distant metastasis

- MX Distant metastasis cannot be assessed
- M0 No distant metastasis
- M1 Distant metastasis

TNM CLASSIFICATION OF CARCINOMAS OF THE URINARY BLADDER

STAGE GROUPING

• Stage 0a	Ta	N0	M0
• Stage 0is	Tis	N0	M0
• Stage I	T1	N0	M0
• Stage II	T2a, b	N0	M0
• Stage III	T3a, b	N0	M0
•	T4a	N0	M0
•	T4b	N0	M0
•	Any T	N1, N2, N3	M0
•	Any T	Any N	M1

TUMORI MOKRAĆNE BEŠIKE

- 4.mesto svih malignoma muskaraca,5.mesto kod zena
- incidenca u porastu-1970 30.000, a 1990. 53.000 slucajeva.
- smrtnost od besicnog kancera 3-5% svih malignoma u USA
- M:Z= 2,7:1. Pik incidencije 7.decenija
- U Srbiji 1999 772 nova slucaja, 7,9%

TUMORI MOKRAĆNE BEŠIKE

- NEOPLAZIJA –KOMPLEKSAN PROCES-KONTINUIRANOM INTERAKCIJOM GENA,GENSKIH PRODUKATA,FAKTORA RASTA,STROMALNIH FAKTORA I SISTEMSKOG IMUNITETA.
- Kancerogeni za tumore mokracne besike
  - dokazani- kancerogeni ugljovodonici,pusenje i dr.
  - moguci
  - teoretski

TUMORI MOKRAĆNE BEŠIKE

KANCEROGENEZA-INICIJACIJA, PROMOCIJA, PROGRESIJA, PROLIFERACIJA

- GENETSKI FAKTORI
  - hromozomske aberacije – 1,3,,5,7,9,18,19.
  - genetske aberacije- prekomerna ekspresija genskih proteina-ras,myc,bcl-2,Rb,MDR-1,p53.
  - geni koji kontrolisu supresiju-SUPRESORI- vazniji od genakoji kontrolisu proliferaciju
  - latentni perod inicijacija-klin,manifestacije- 5 godina.

TUMORI MOKRAĆNE BEŠIKE

DETEKCIJA I PRACENJE(MONITORING) KANCERA M.BESIKE

- GENETSKI FAKTORI
  - odredjivanje prisustva neoplazme
  - Lokalizacija procesa i pravca sirenja
  - procena njegovog bioloskog potencijala

TUMORI MOKRAĆNE BEŠIKE

METODE DIJAGNOSTIKOVANJA

- utvrdjene metode-bimanuelna palpacija,cistoskopija sa biopsijom,citologija urina
- novije metode-UZ,CT i dr.
- moderna tehnologija-MRI,FISH,PCR

TUMORI MOKRAĆNE BEŠIKE

DEFINITIVNA DIJAGNOZA TUMORA HISTOPATOLOSKOM ANALIZOM

- uzimanje materijala-biopsijiom,TUR,cistektomijom
- histopatoloska obrada-fikscija,serijsko secenje-multipli preseci

TUMORI MOKRAĆNE BEŠIKE

BIOPSIJA

- histoloski tip tumora
- diferentovanost(gradus)
- infiltracija lamina proprije ili misicnog sloja zida mokracne besike(detruzora)
- limfovaskularna invazija
- nekroza

TUR- kao kod biopsije+ masa i promeri uzoraka(makroskopski opis)

TUMORI MOKRAĆNE BEŠIKE

CISTEKTOMIJA

- makroskopski opis

Parcijalna- kao TUR + ivice resekcije da li su “u zdravo”,

Totalna—okolni organi

M- prostata,semene kesice,segment uretera,segment uretre,segement distalnog vas deferensa

Z- uterus i adnekse ,segement uretera,unutrasnja uretra i deo vagine.

TUMORI MOKRAĆNE BEŠIKE

WHO, WHO/ISUP CONSENSUS

- CARCINOMA IN SITU CIS
  - ravna neinvazivna intraeitelijalna neoplazija sastavljena od anaplasticnih celija- Melicow, Murphy
  - intaktna bazalna membrana.
  - samostalno ili koegzistentno
  - tok nepredvidiv

TUMORI MOKRAĆNE BEŠIKE

PREMALIGNE PROMENE-
DISPLAZIJA I ATIPICNE
HIPERPLAZIJE

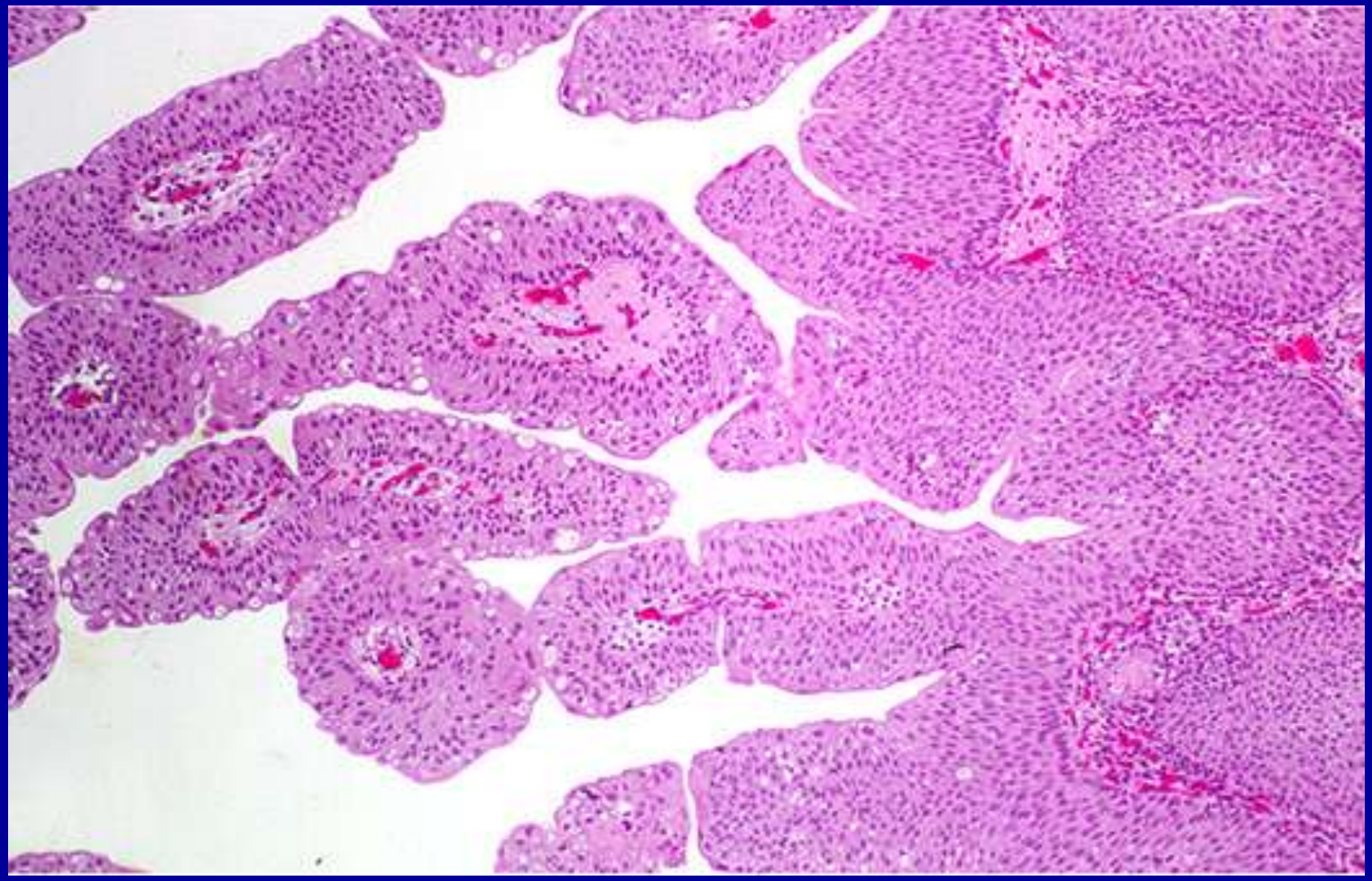
- bez karicnoma manje od 5%
- sa karcinomom 20-86%

TUMORI MOKRAĆNE BEŠIKE

- CITOLOGIJA URINA
- KOSS, 1992
  - skrining- neinvazivna-mesecima pre klinickih manifestacija mogu se naci maligne celije u urinu(Wiener et al, 1993)
  - Cilj- rana detekcija primarne neoplazme
  - pracenje – monitoring- posle terapije.

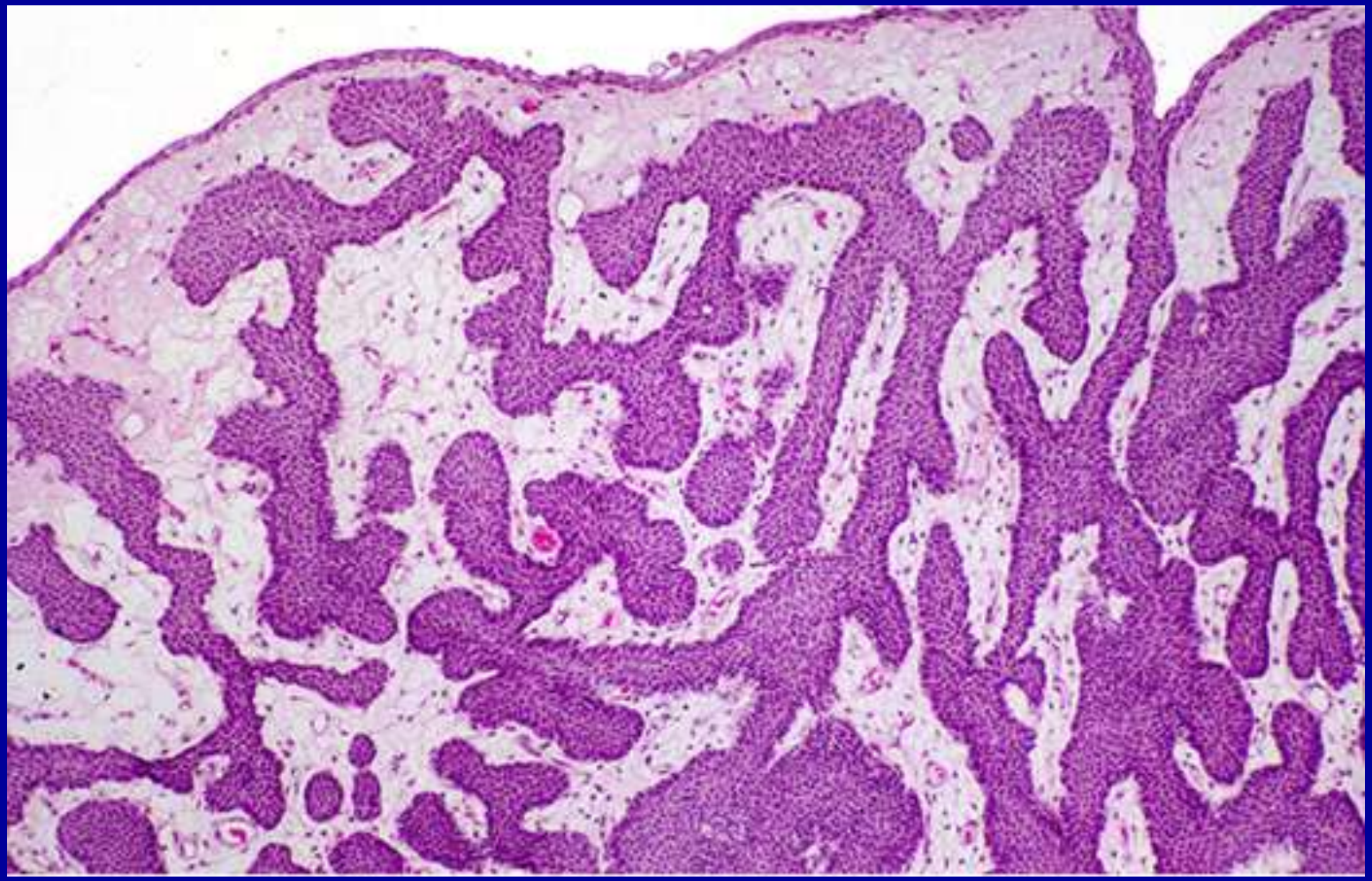
TUMORI MOKRAĆNE BEŠIKE

UROTELNI (TC) PAPILOM



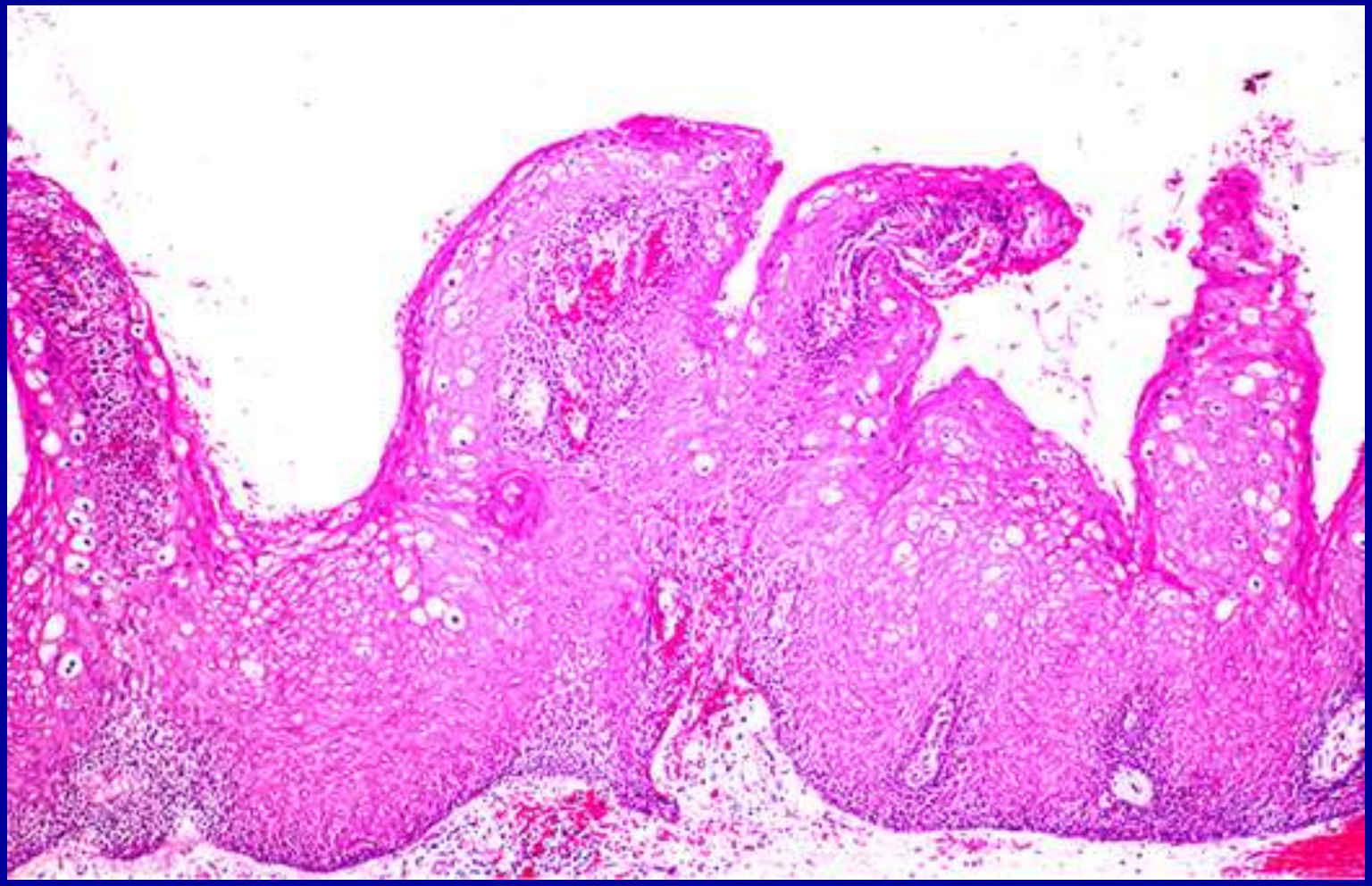
TUMORI MOKRAĆNE BEŠIKE

UROTELNI (TC) PAPILOM-INVERTNI TIP



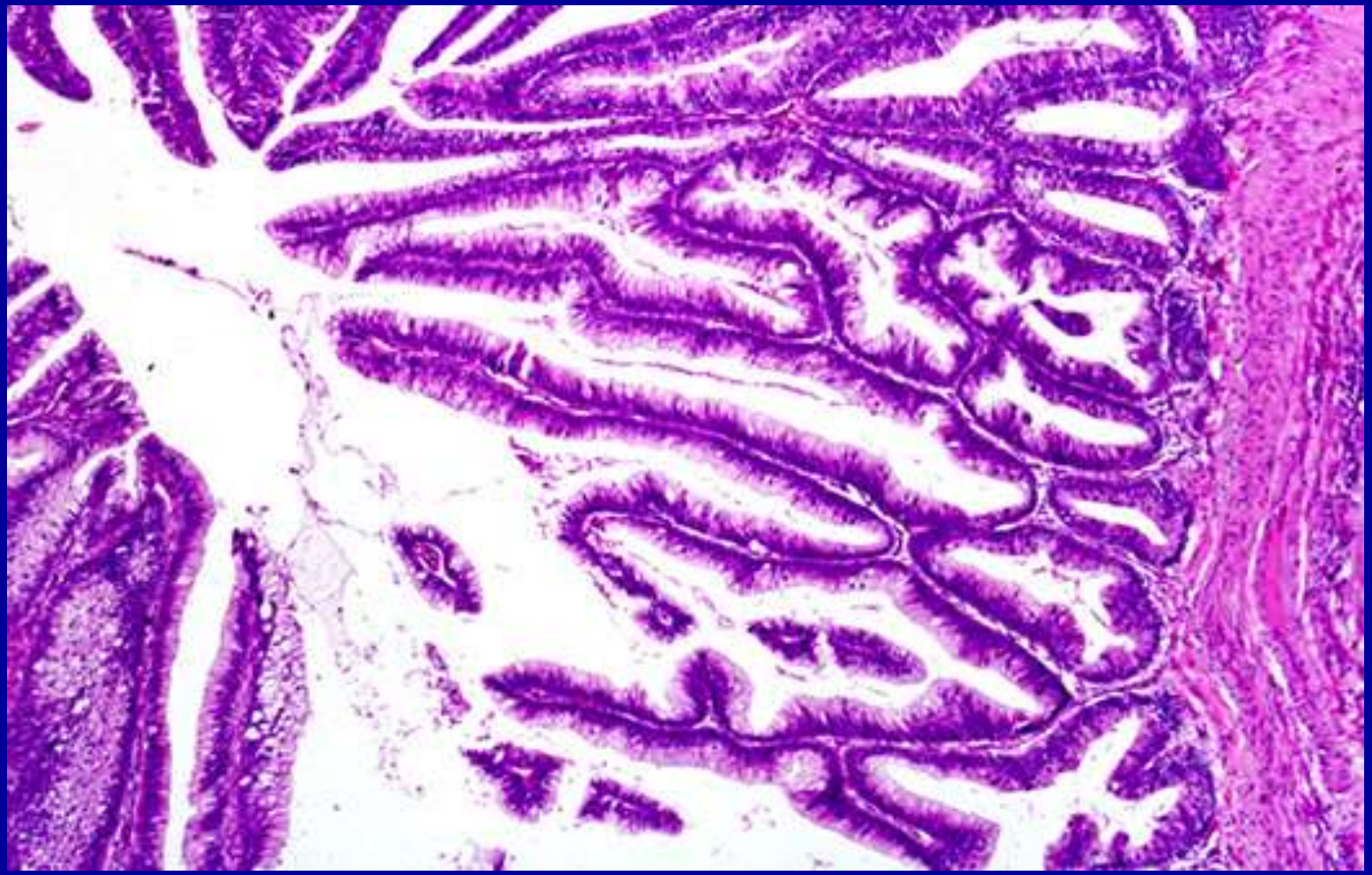
TUMORI MOKRAĆNE BEŠIKE

SKVAMOZNI PAPILOM



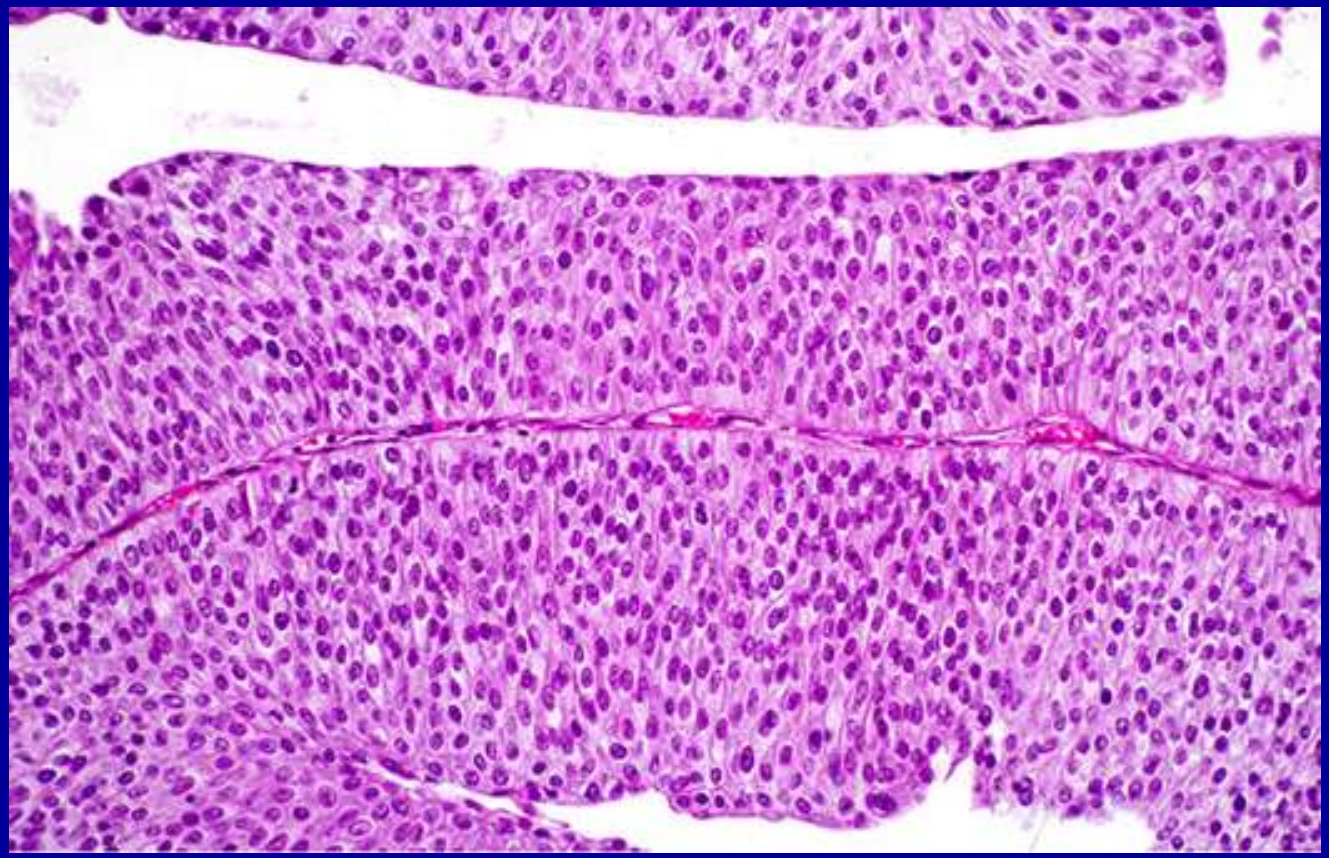
TUMORI MOKRAĆNE BEŠIKE

VILOZNI ADENOM



TUMORI MOKRAĆNE BEŠIKE

PAPILLARY UROTHELIAL (TRANSITIONAL CELL) NEOPLASM OF LOW MALIGNANT POTENTIAL



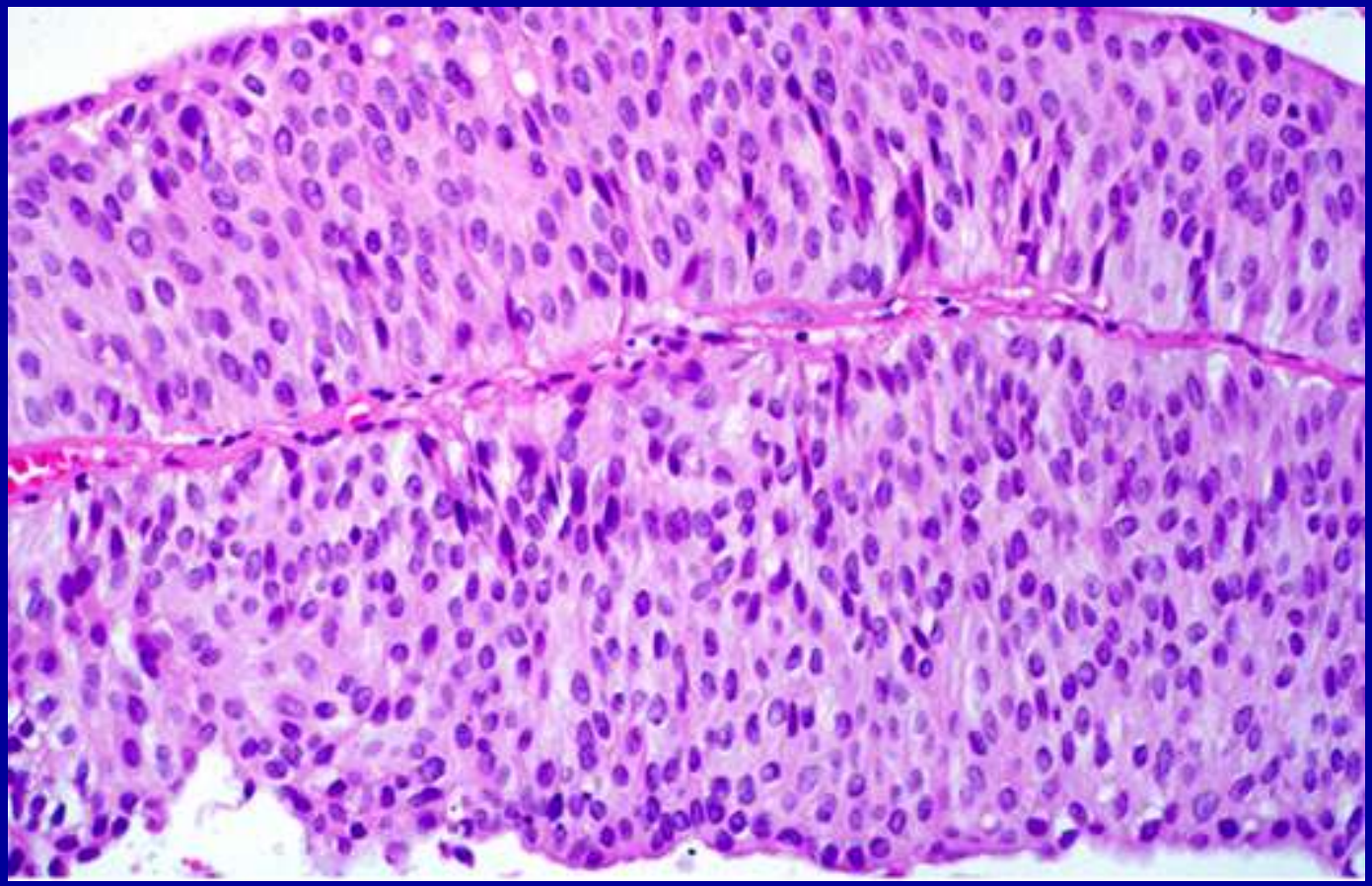
TUMORI MOKRAĆNE BEŠIKE

MALIGNI EPITELIJALNI TUMORI

- Urotelni karcinom-bazicni elementi dijagnostike-nacin rasta, nuklearni gradus i stadijum bolesti.
- Nacin rasta: papilarni , infiltrativni, in situ i kombinacija

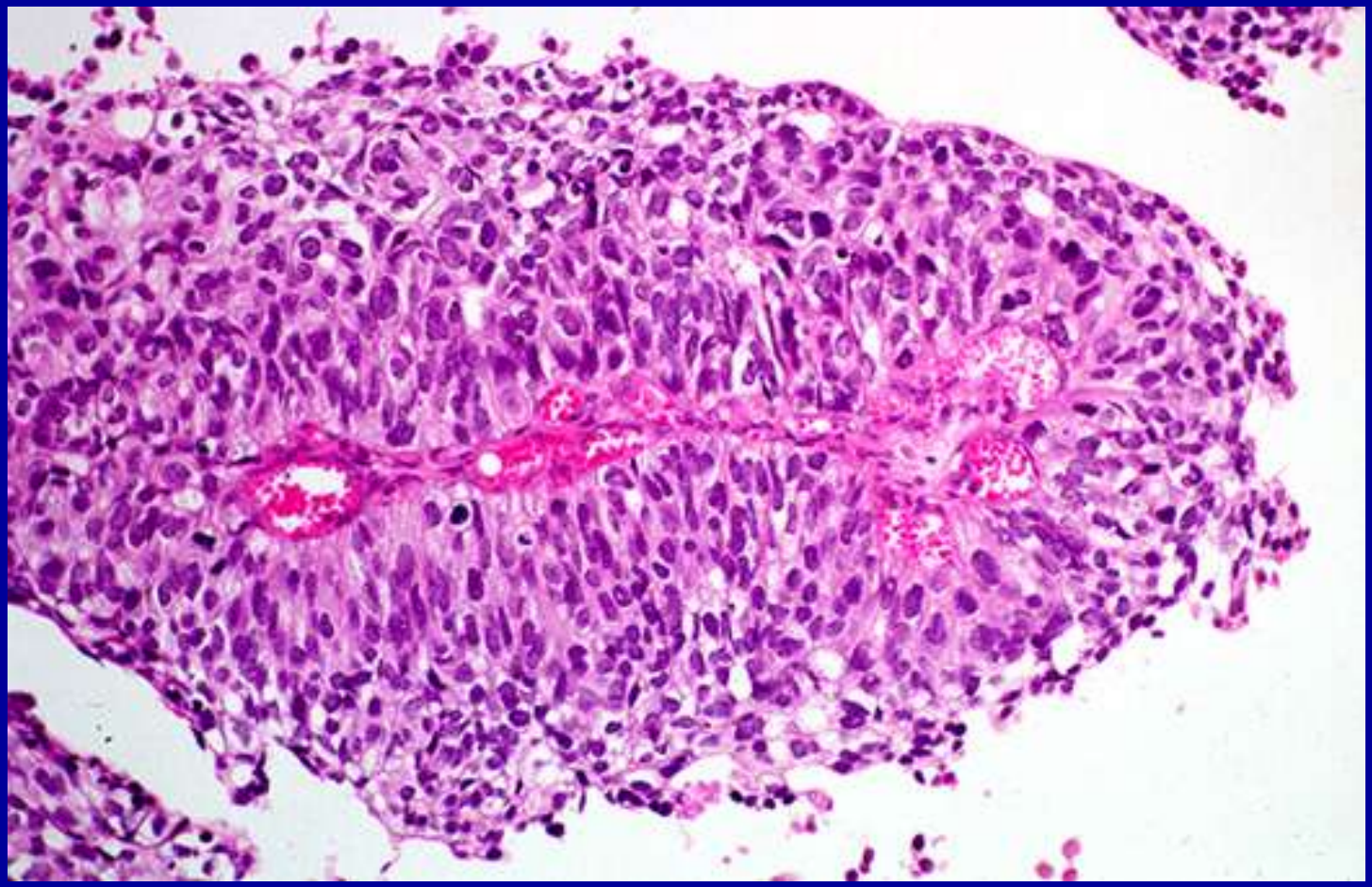
TUMORI MOKRAĆNE BEŠIKE

PAPILARNI UROTELNI (TCC) KARCINOMA



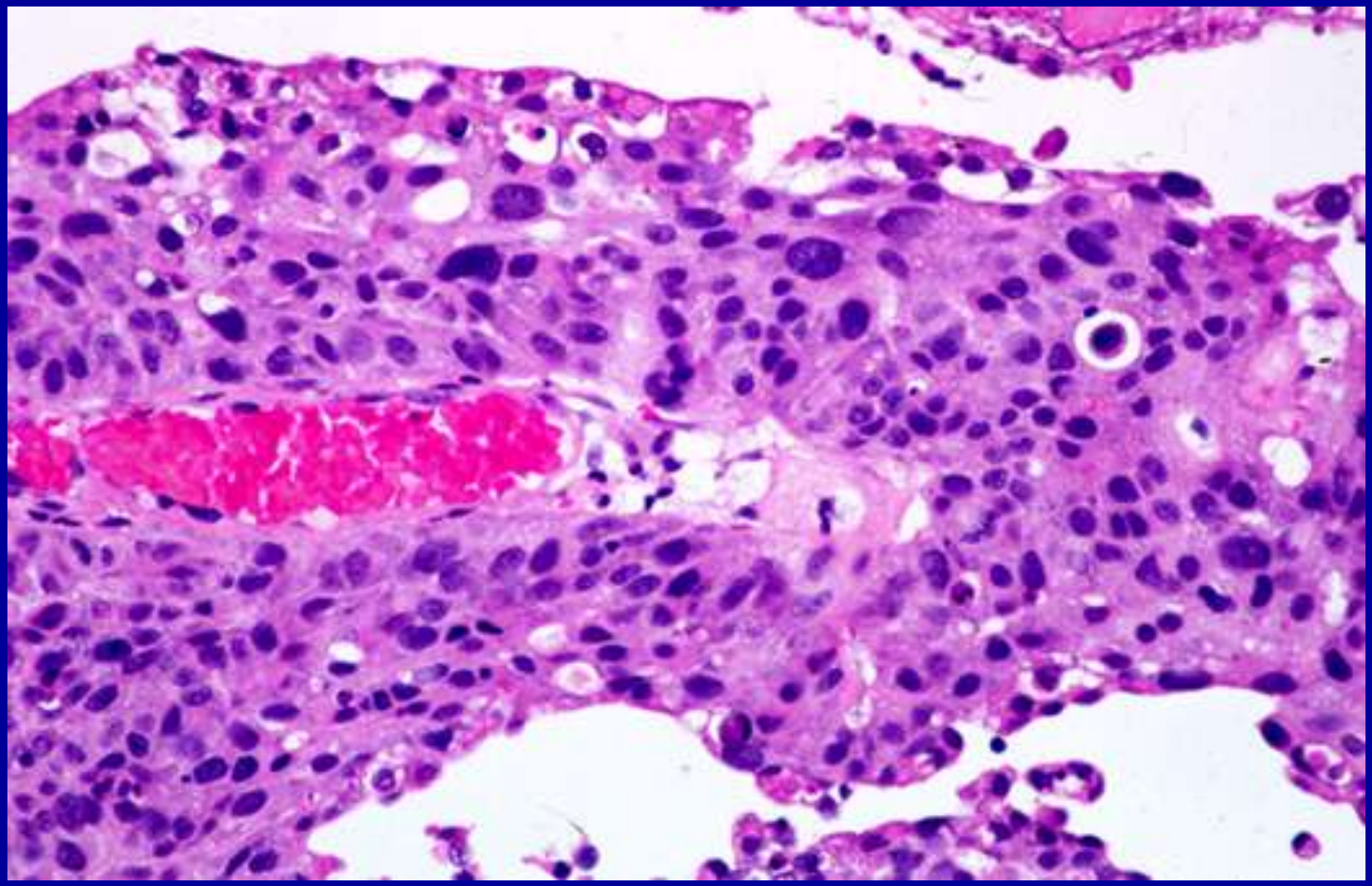
TUMORI MOKRAĆNE BEŠIKE

PAPILARNI UROTELNI (TCC) KARCINOMA



TUMORI MOKRAĆNE BEŠIKE

PAPILARNI UROTELNI (TCC) KARCINOMA

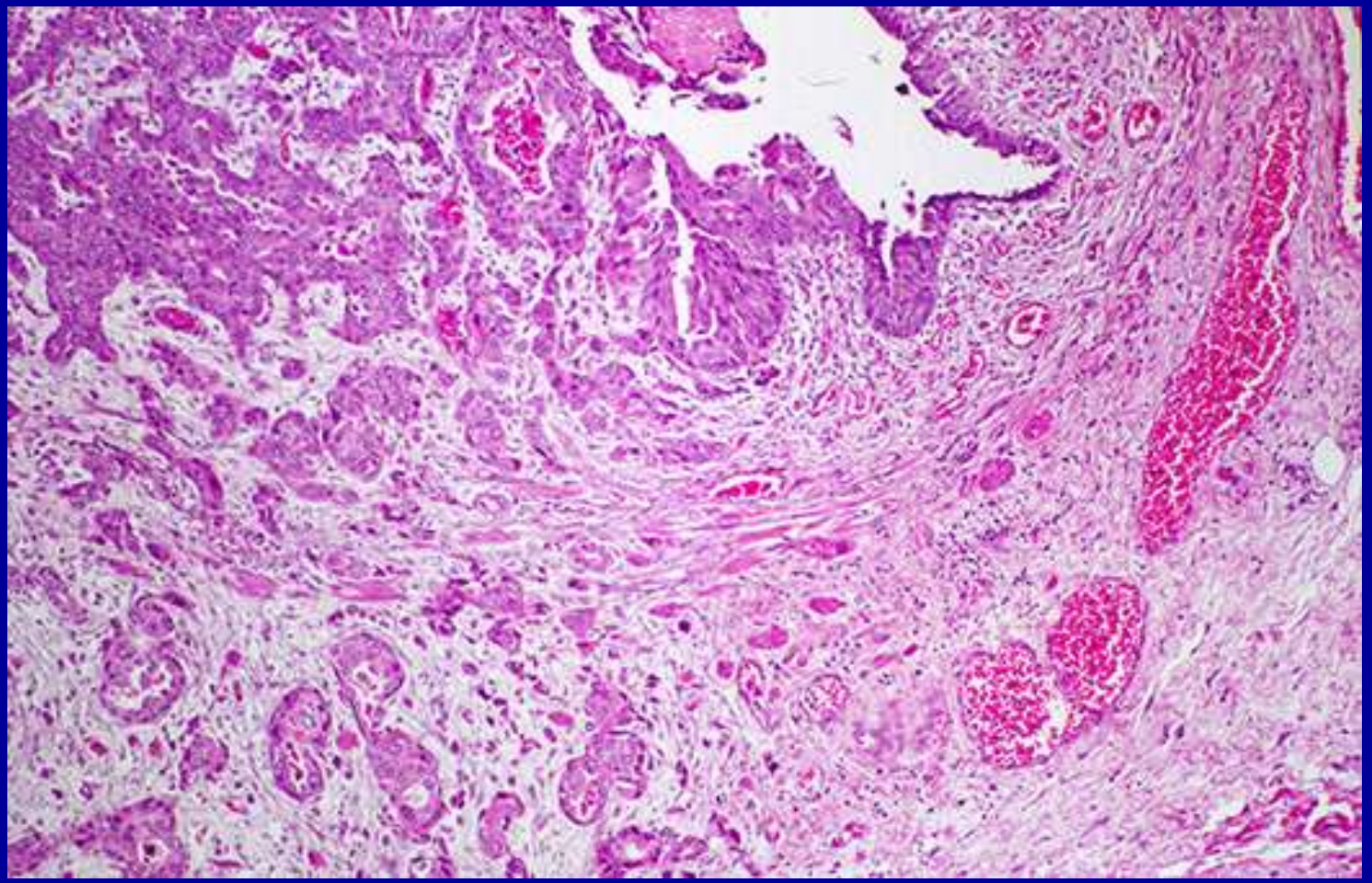


TUMORI MOKRAĆNE BEŠIKE

INFILTRATIVNI UROTELNI (TCC) KARCINOM

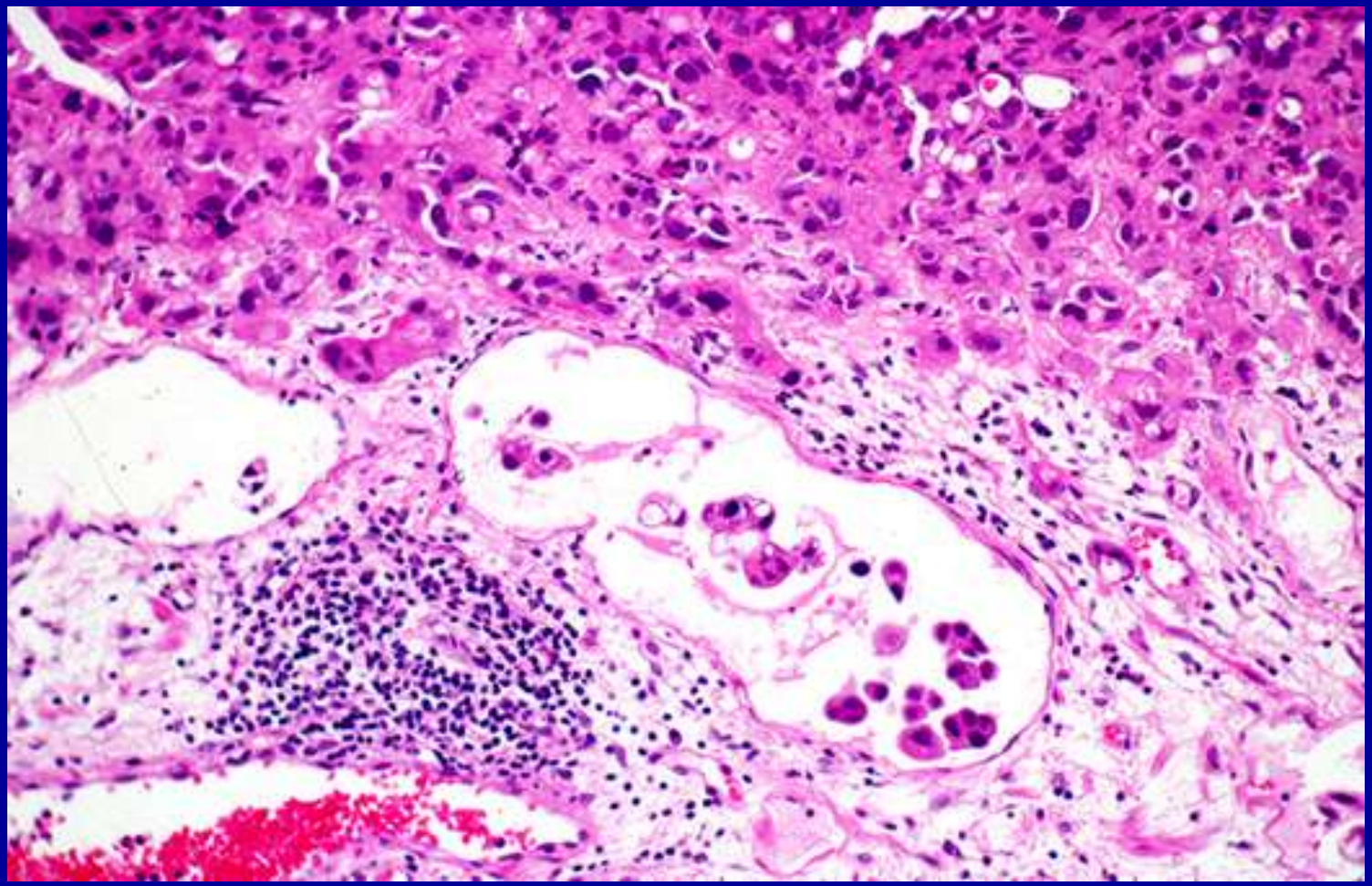
TUMORI MOKRAĆNE BEŠIKE

INFILTRATIVNI UROTELNI (TCC) KARCINOM



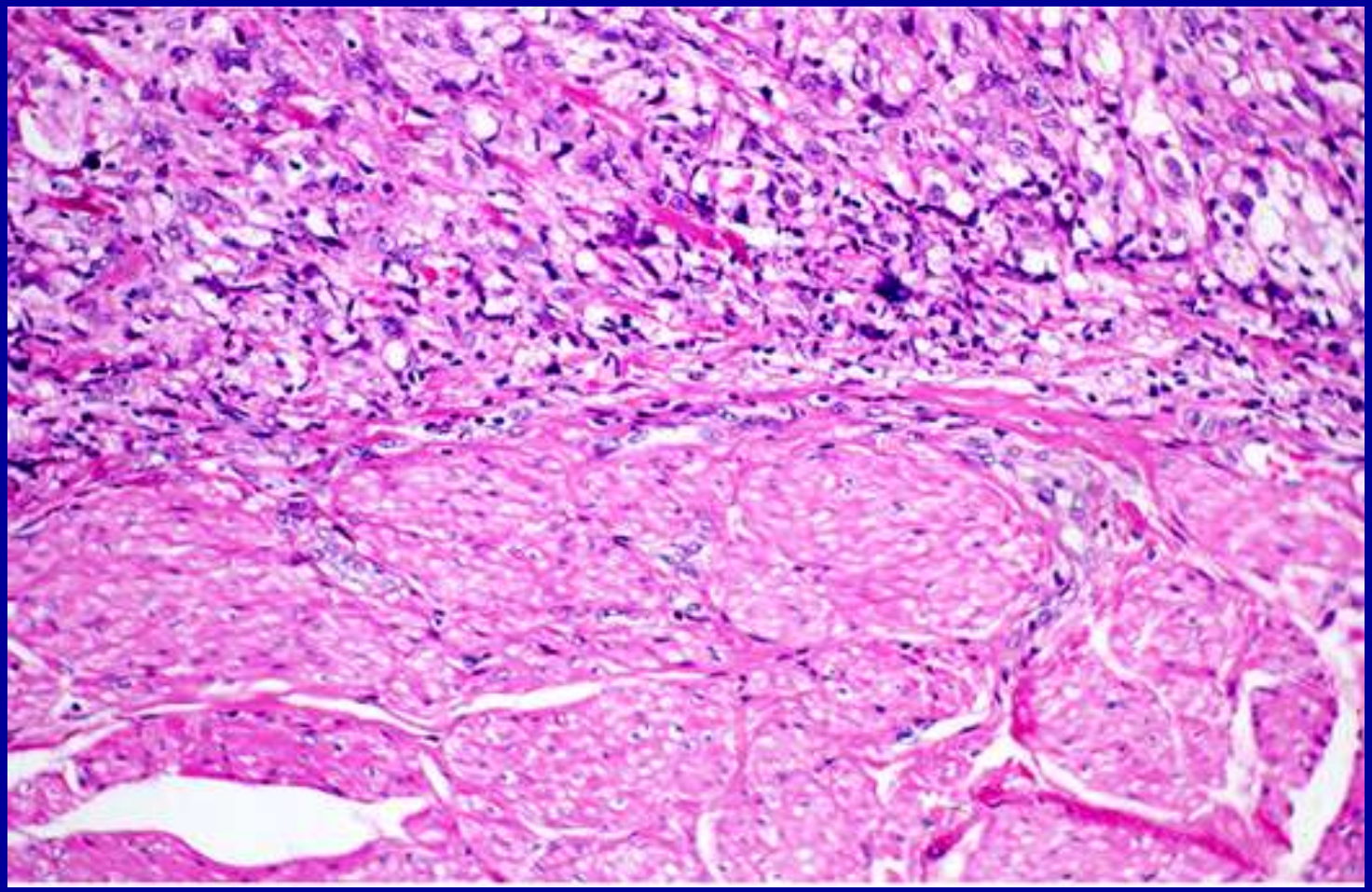
TUMORI MOKRAĆNE BEŠIKE

INFILTRATIVNI UROTELNI (TCC) KARCINOM



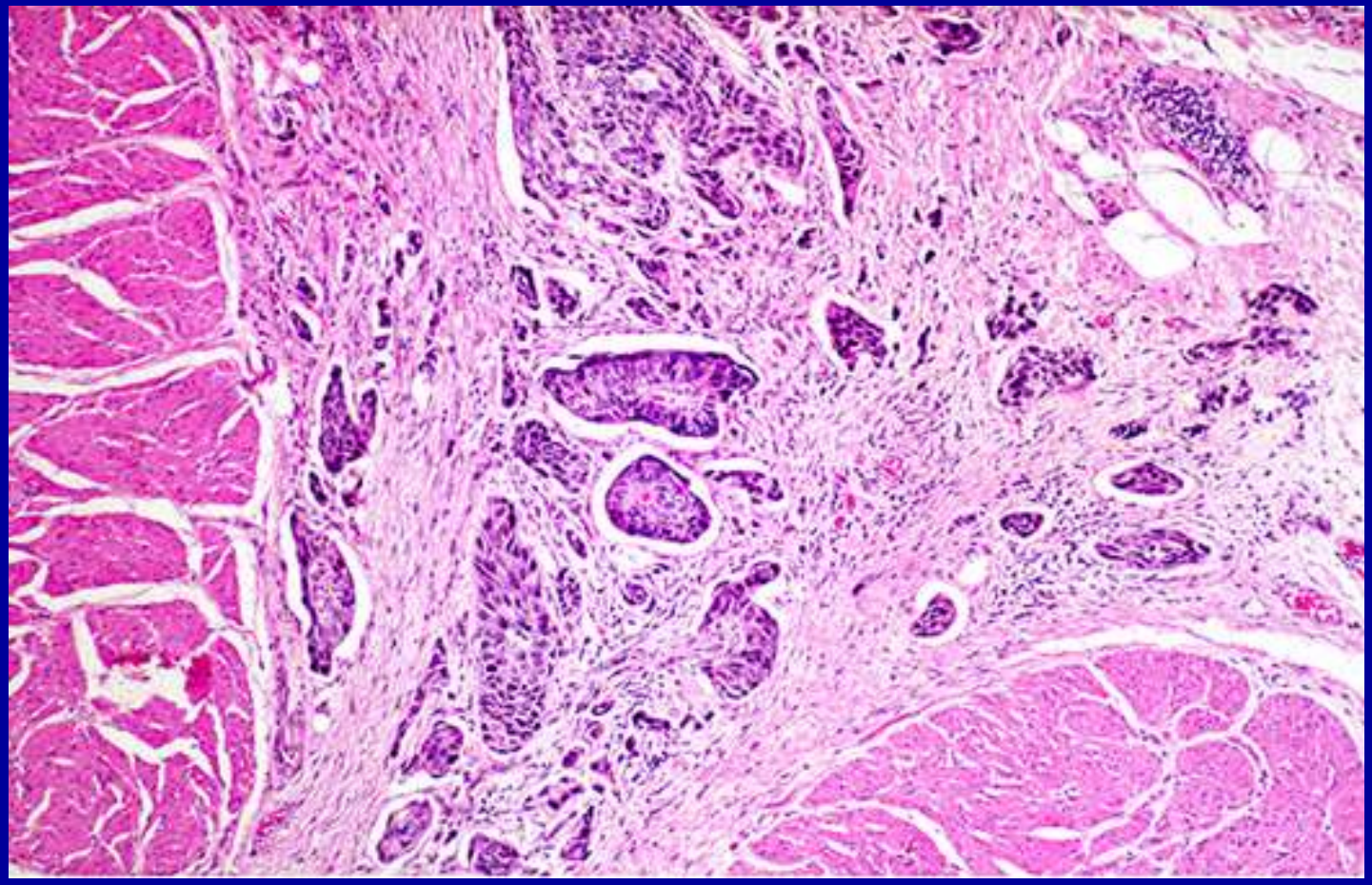
TUMORI MOKRAĆNE BEŠIKE

INFILTRATIVNI UROTELNI (TCC) KARCINOM



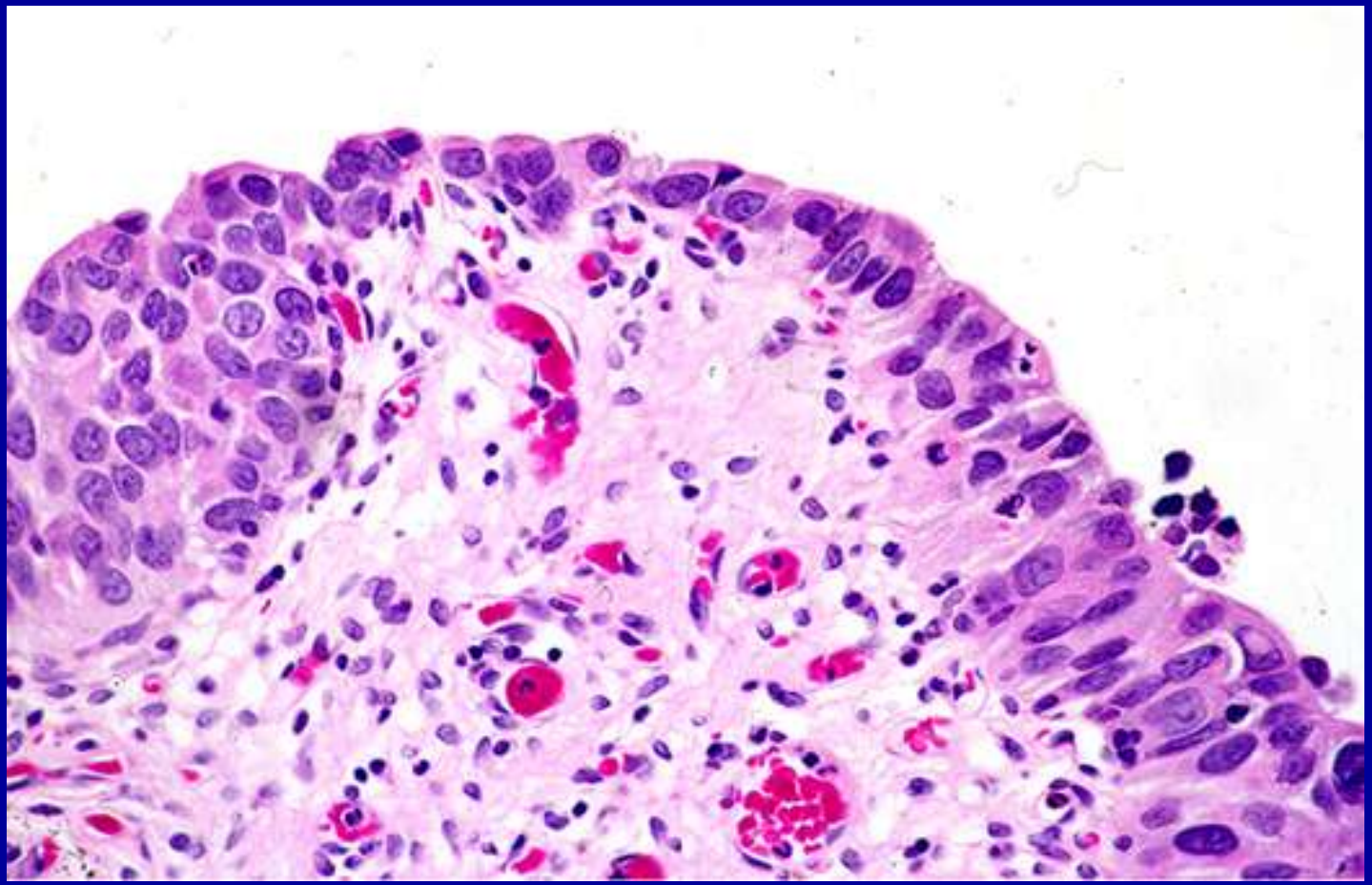
TUMORI MOKRAĆNE BEŠIKE

INFILTRATIVNI UROTELNI (TCC) KARCINOM



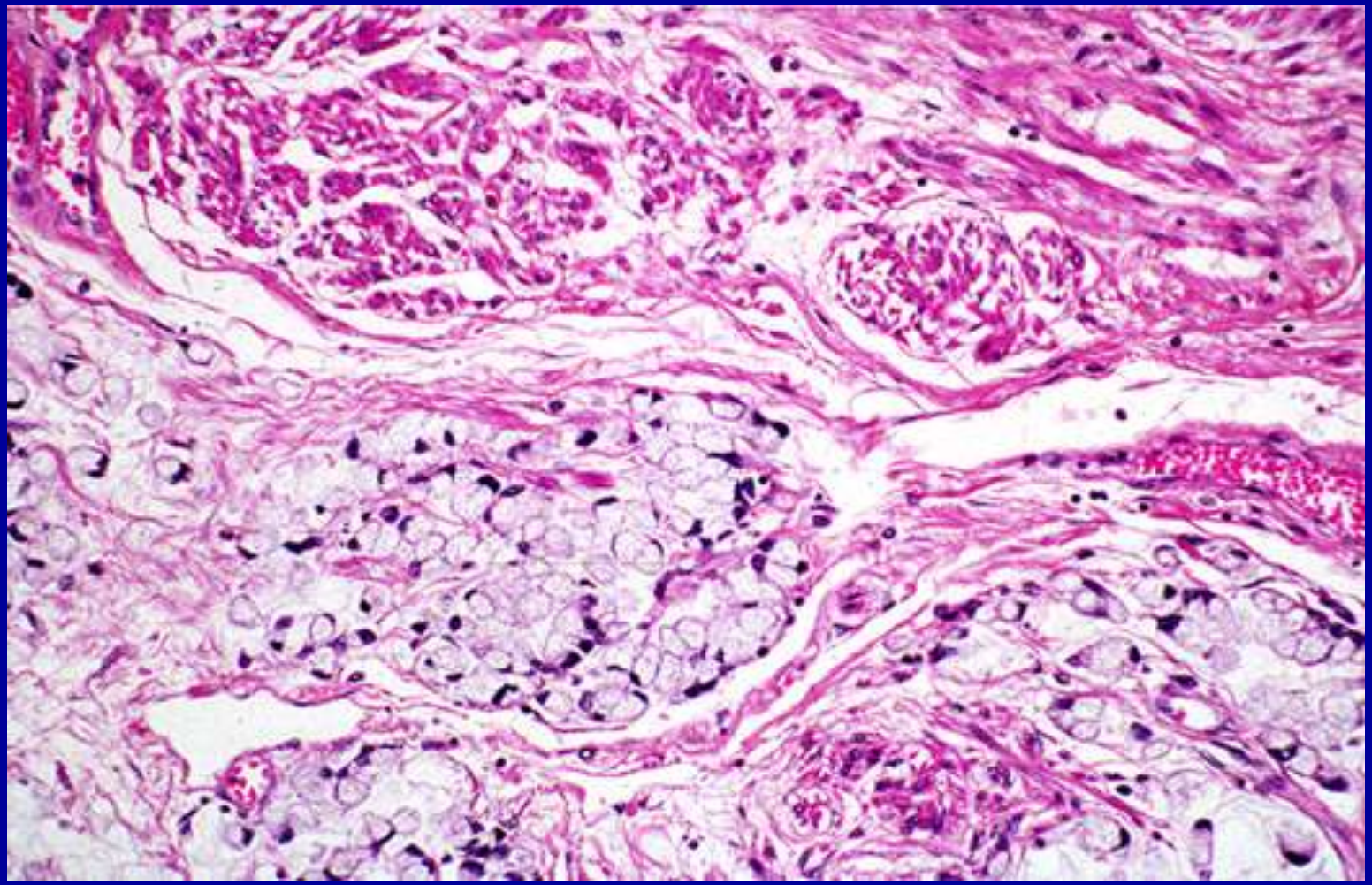
TUMORI MOKRAĆNE BEŠIKE

CACINOMA IN SITU- INTAKTNA BAZALNA MEMBRANA



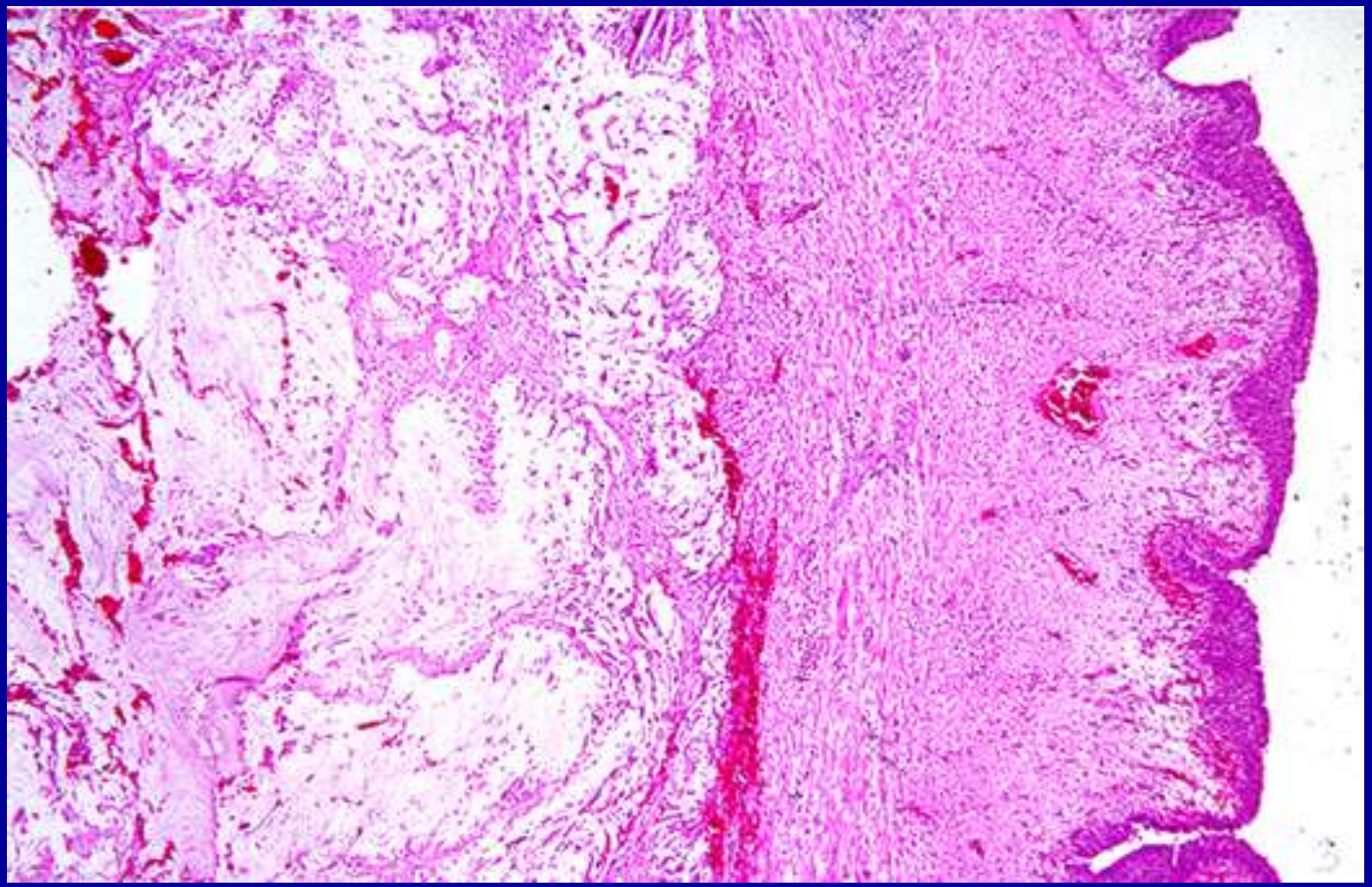
TUMORI MOKRAĆNE BEŠIKE

ADENOCARCINOMA



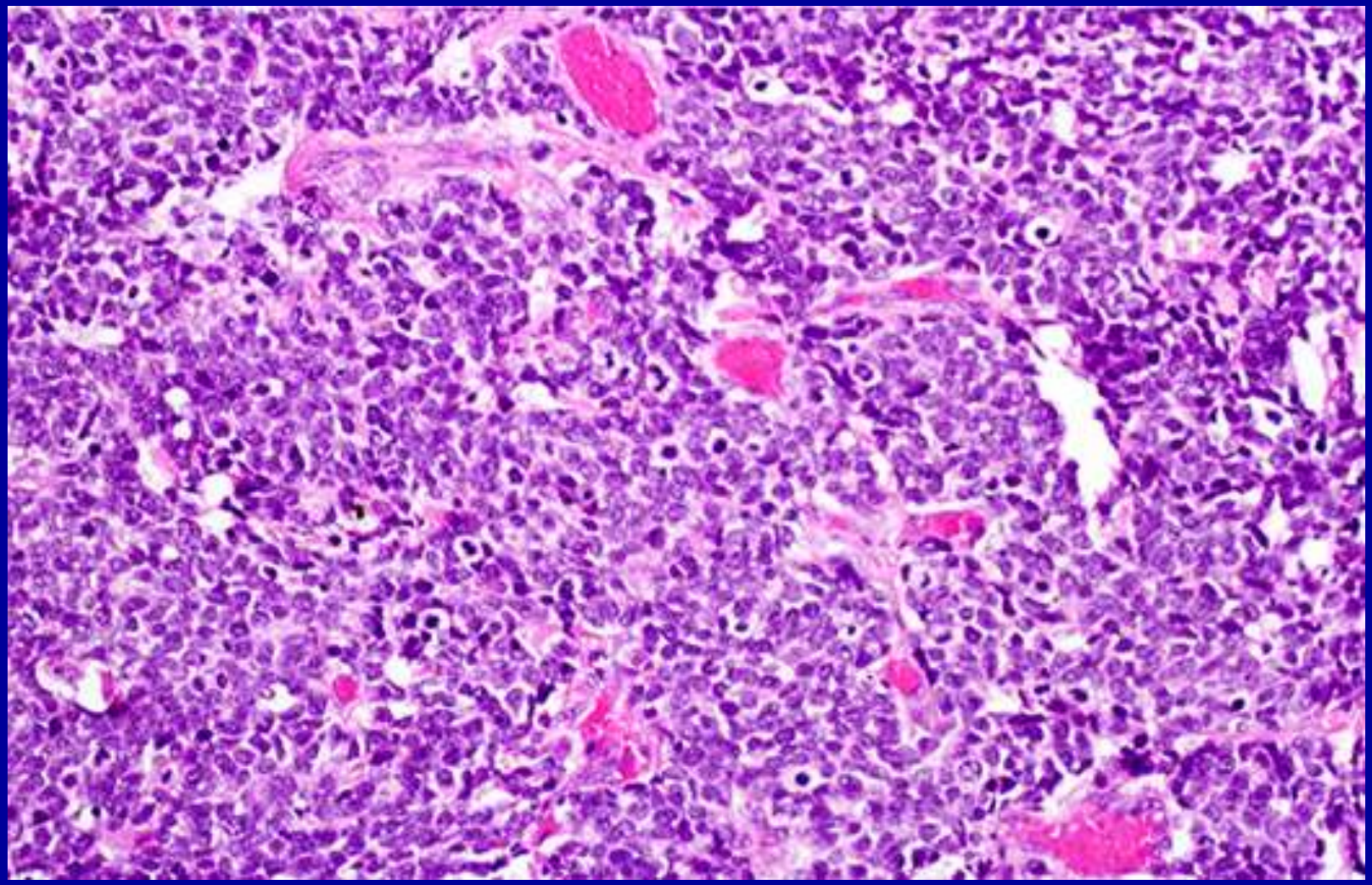
TUMORI MOKRAĆNE BEŠIKE

URAHALNI KARCINOM



TUMORI MOKRAĆNE BEŠIKE

NEDIFERENTOVANI KARCINOM

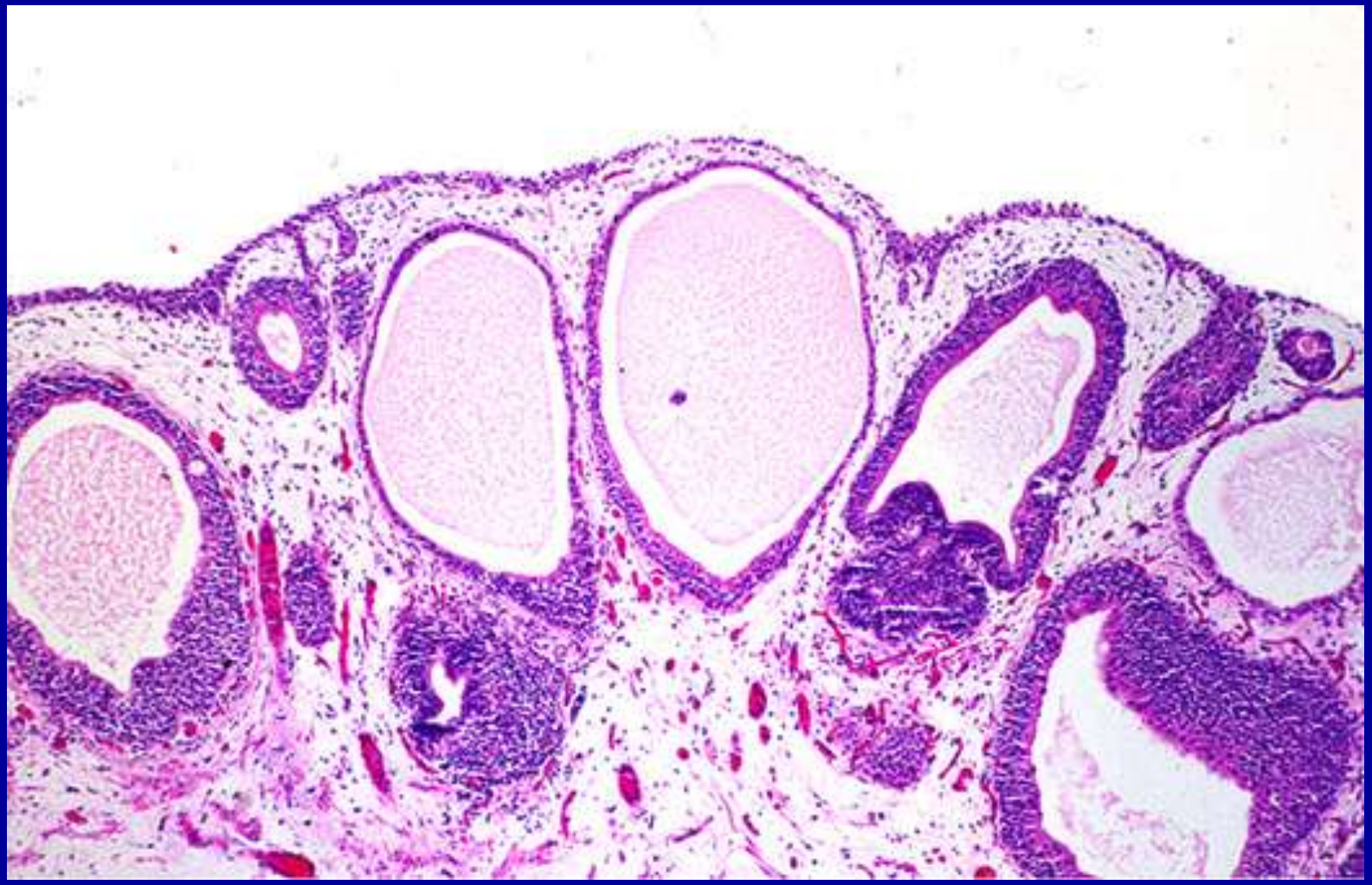


TUMORI MOKRAĆNE BEŠIKE

RABDOMIOSARKOM

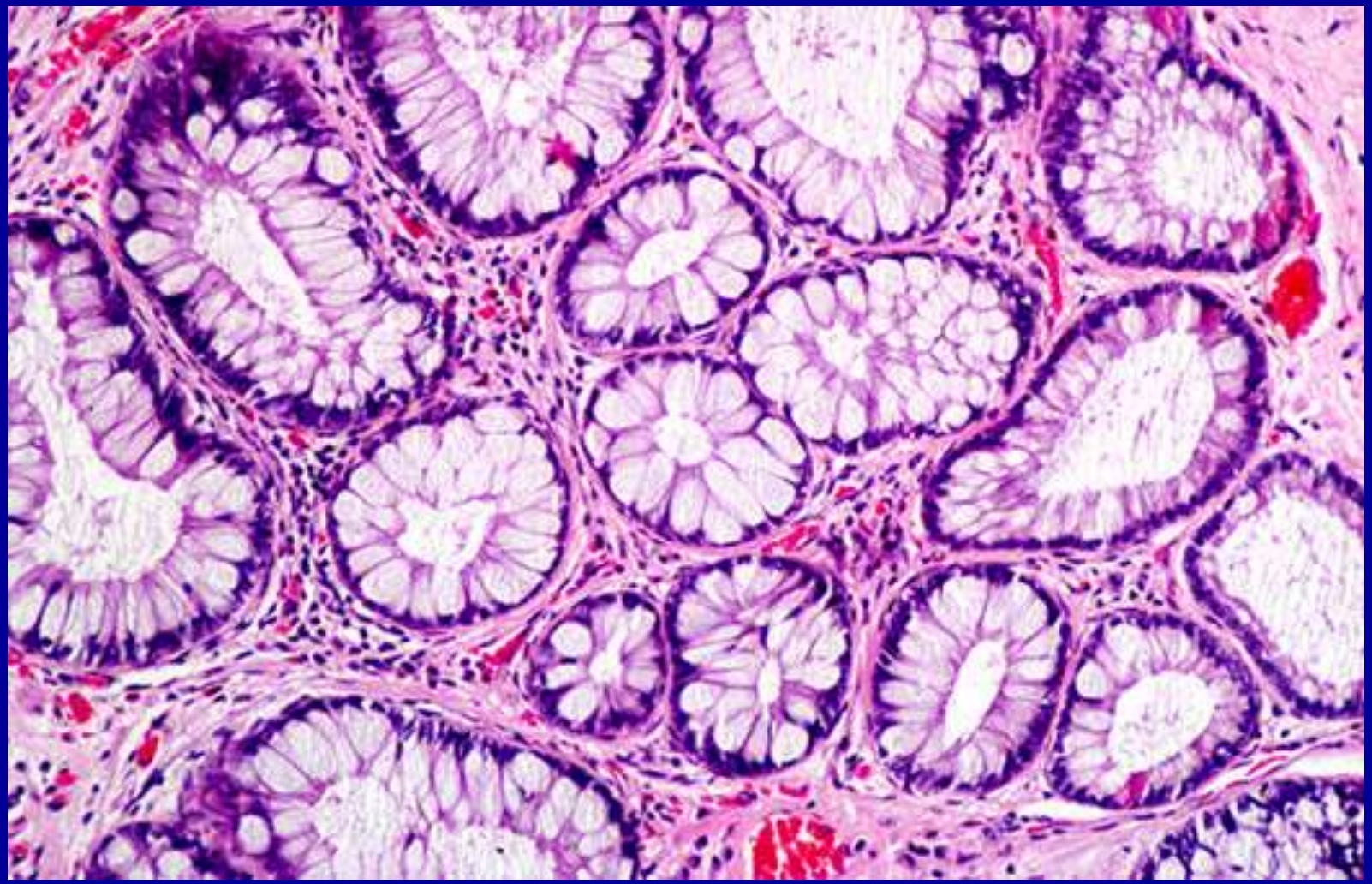
PROMENE MOKRAĆNE BEŠIKE

CYSTITIS CYSTICA



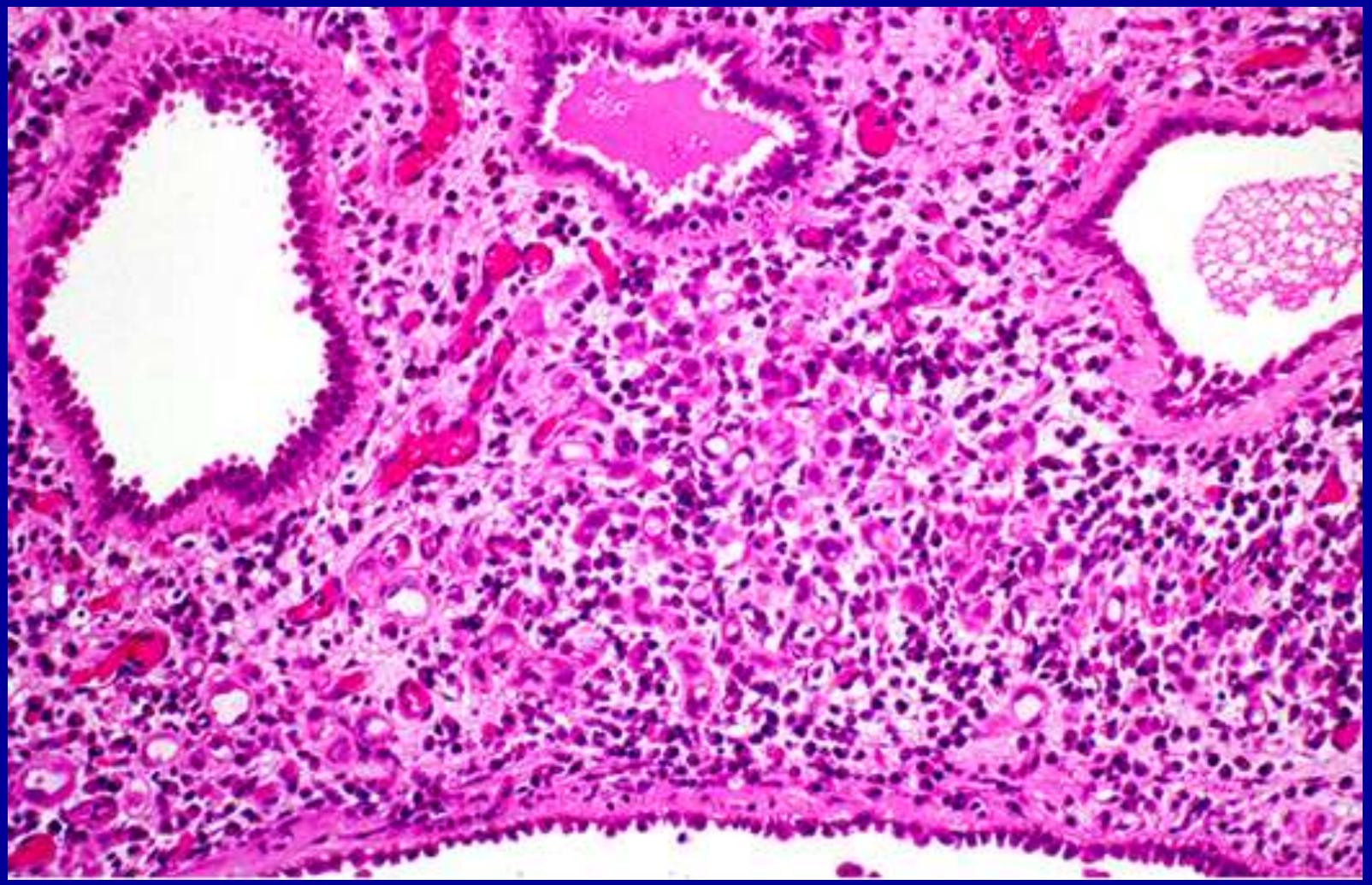
PROMENE MOKRAĆNE BEŠIKE

GLANDULARNA METAPLAZIJA



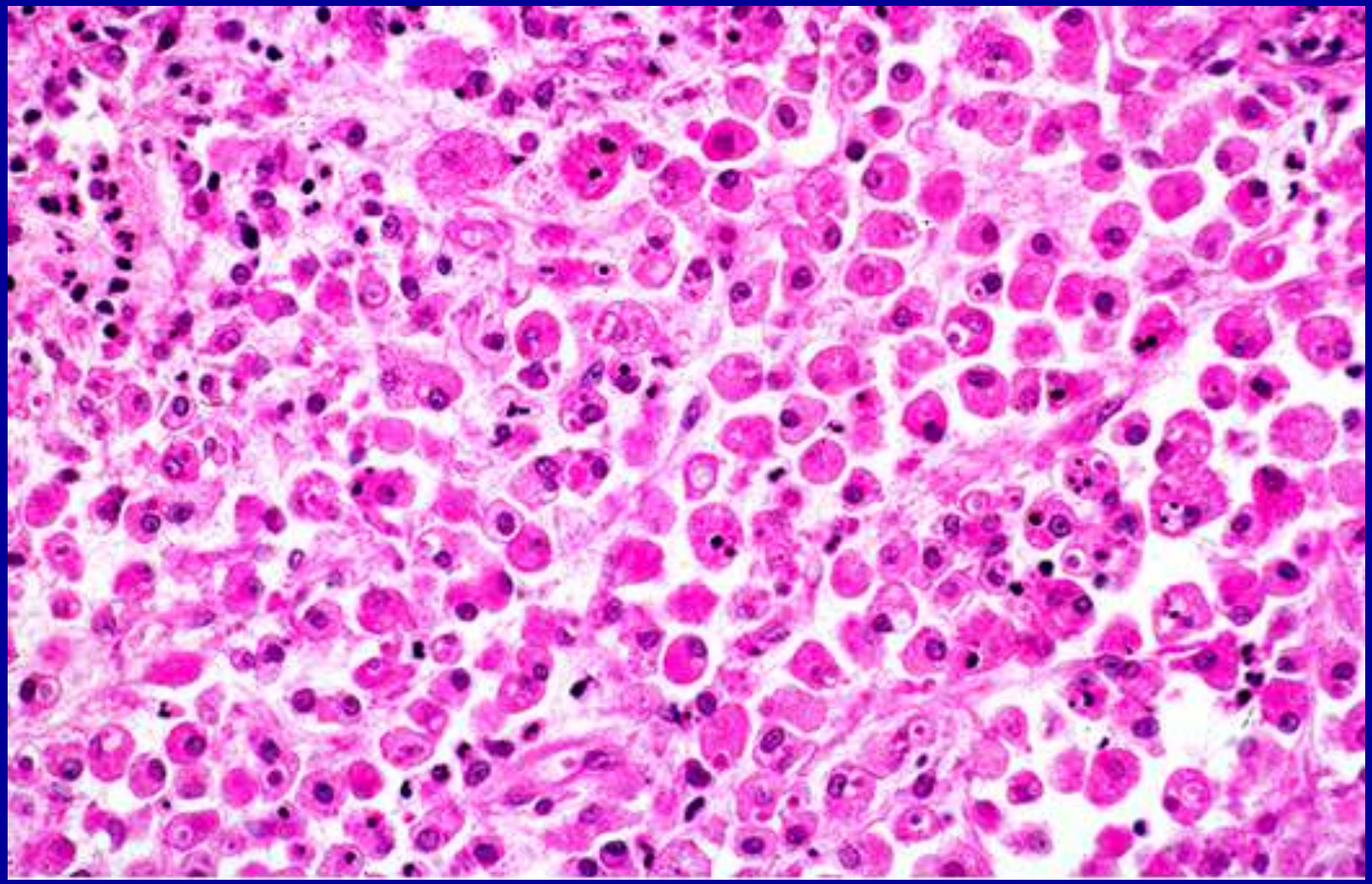
PROMENE MOKRAĆNE BEŠIKE

NEFROGENI ADENOM



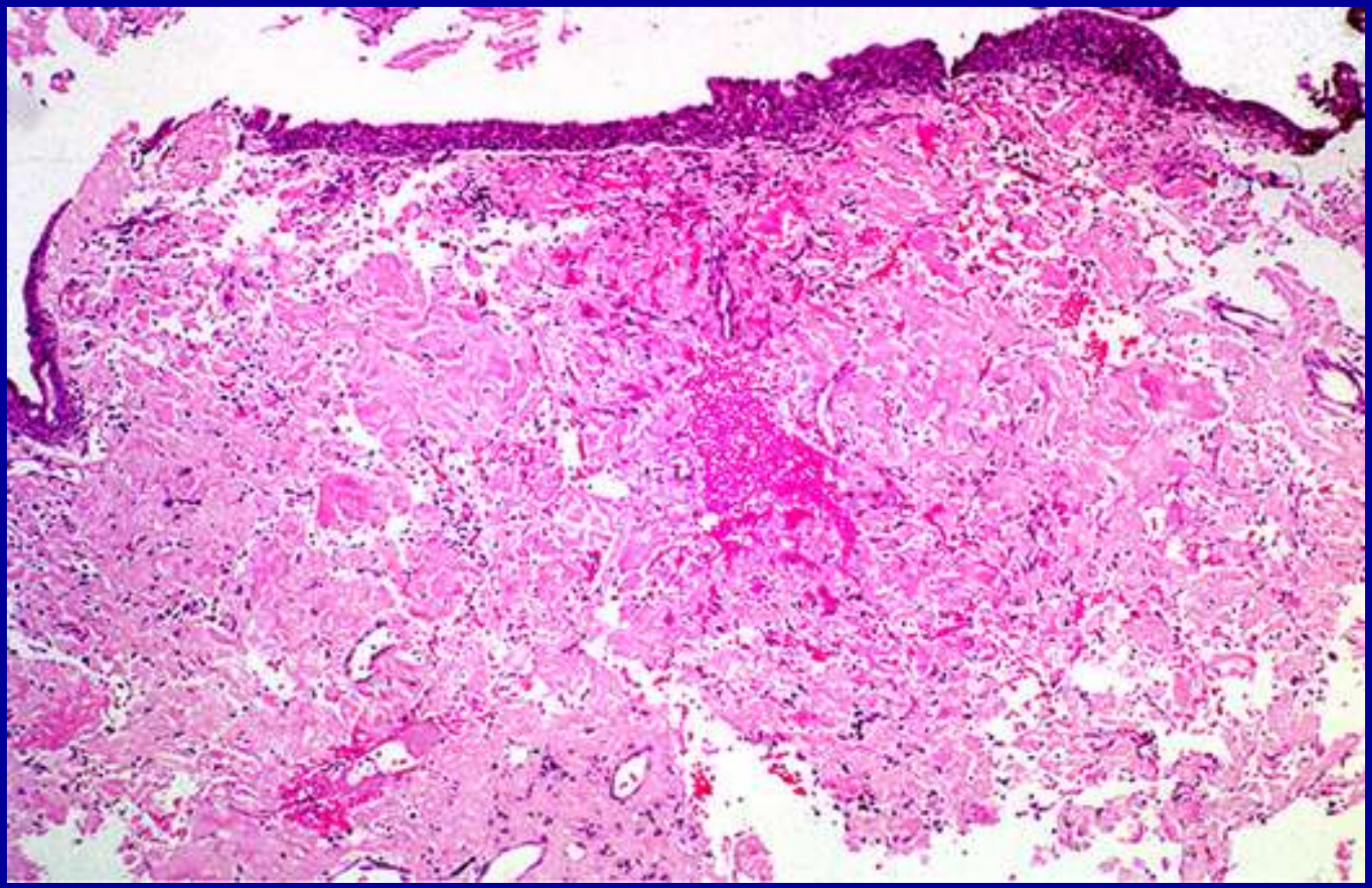
PROMENE MOKRAĆNE BEŠIKE

MALAKOPLAKIJA



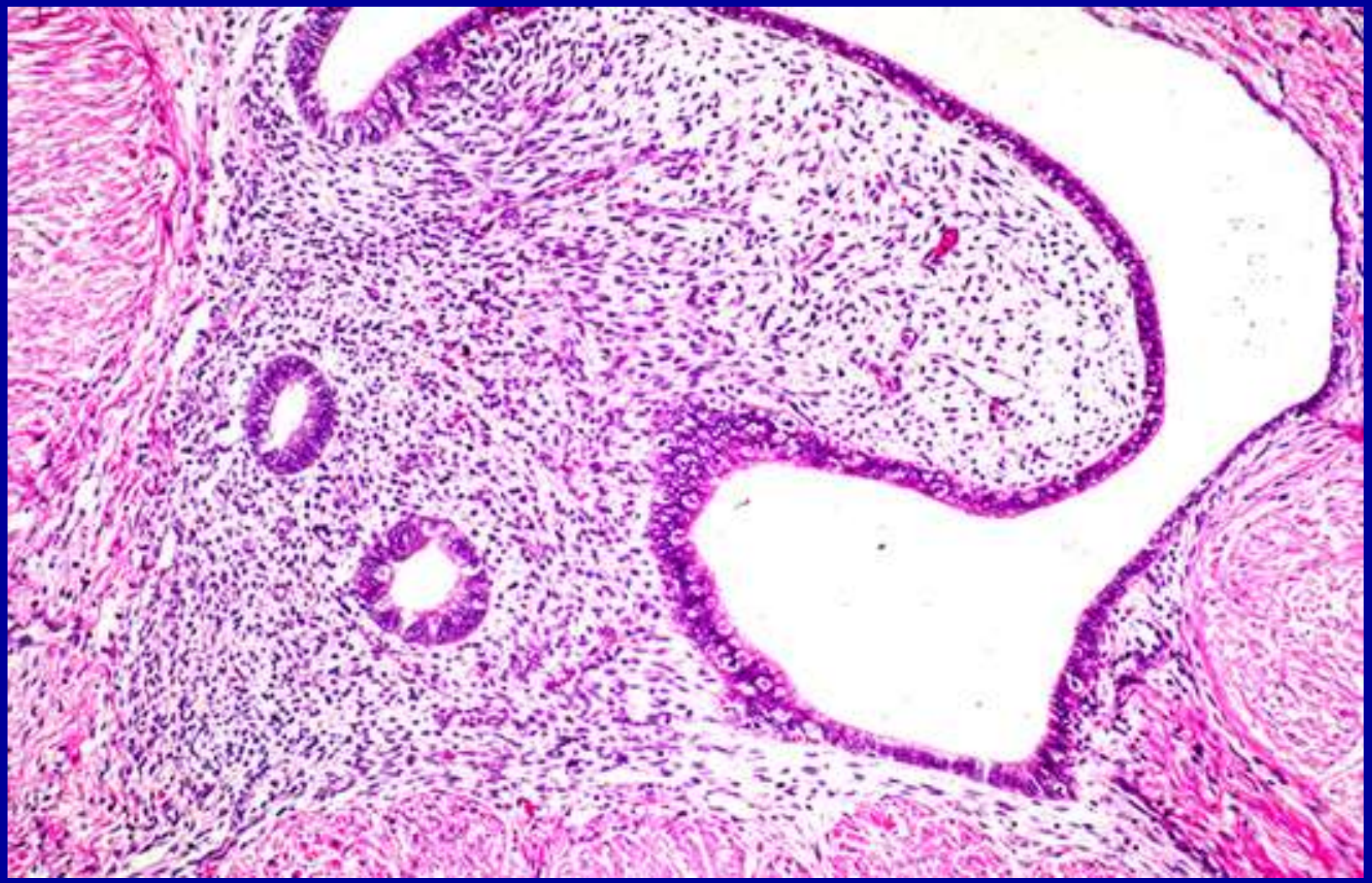
PROMENE MOKRAĆNE BEŠIKE

AMILOIDOZA



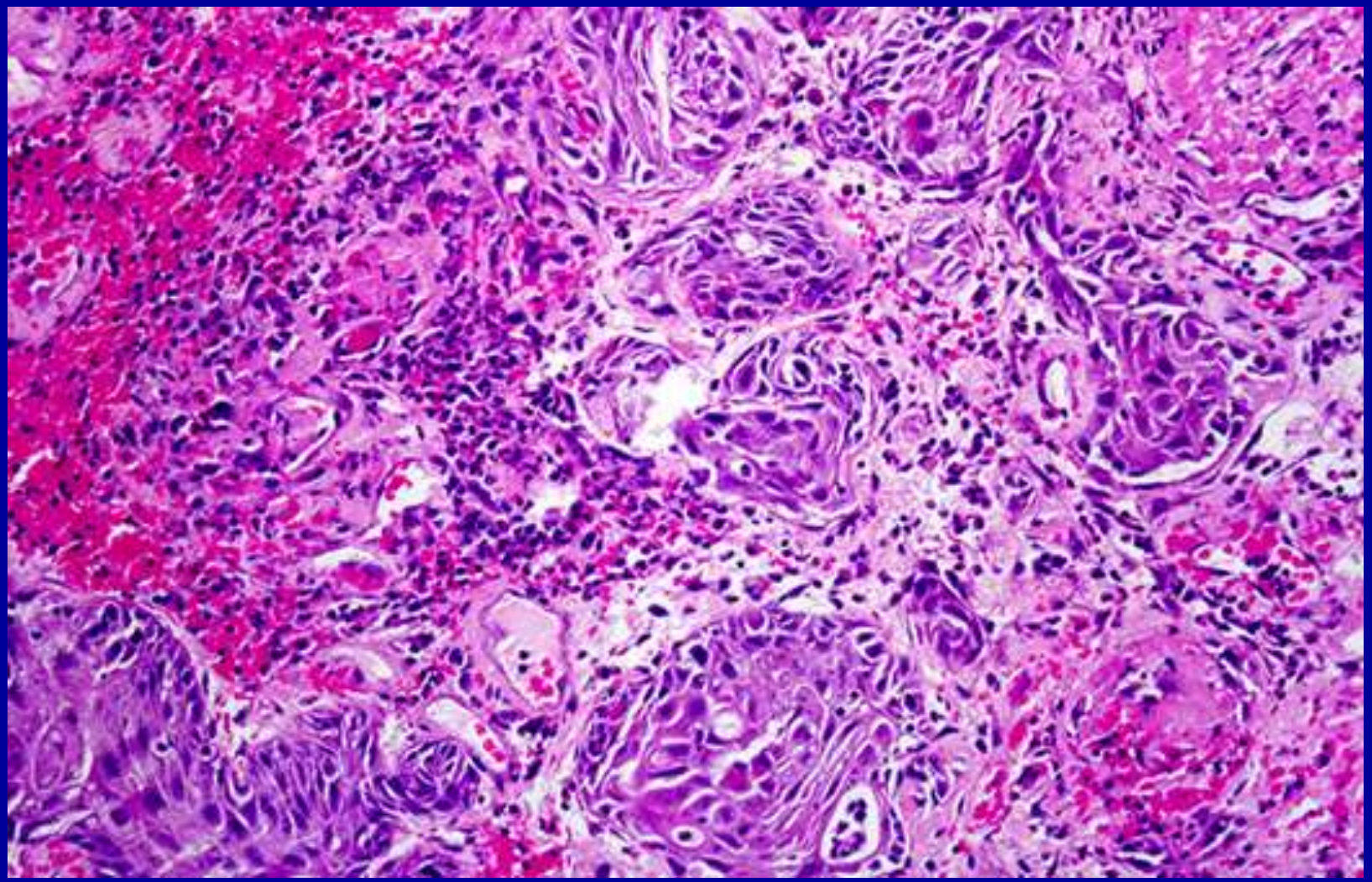
PROMENE MOKRAĆNE BEŠIKE

ENDOMETRIOSIS



PROMENE MOKRAĆNE BEŠIKE

RADIACIONI CISTITIS



PATOLOGIJA URETRE I PIJELUMA

- Čine oko 7% svih malignoma bubrega
- Skoro svi (preko 90%) TCC
- Etiologija i patogeneza kao kod tumora m. bešike
- Udruženost sa abusus phenacetini
- Udruženost za hroničnim bubrežnim bolestima- BEN
- Životna dob - najčešće 50-70g
- 2/3 muškarci
- Lokalizacija-ekstrarenalni deo pijeluma

PATOLOGIJA URETRE I PIJELUMA

TCC

PATOLOGIJA URETRE

- POLIPI
  - češće stečeni –intraluminalne lezije
- NEOPLAZIJE
  - slicne kao kod tumora besike
  - problem- detekcija, monitoring citoloski- urin.
  - velika udruzenost sa bolestima bubrega.
  - velika udruzenost sa tumorima urotela drugih lokalizacija-besika, uretra.

PATOLOGIJA URETRE

- POLIPI
  - vilozni
  - prostaticni
- Simptomi-opstruktivni
- VILOZNI POLIPI

PATOLOGIJA URETRE

- DRUGE KONGENITALNE ANOMALIJE
  - kongenitalna meatalna stenoza
  - uretralna duplikacija

PATOLOGIJA URETRE

- KARUNKULA
- SEKSUALNO TRANSMISIVNE BOLESTI
- KONDILOMI
- METAPLAZIJA
  - skvamozna
  - nefrogena
  - intestinalna

PATOLOGIJA URETRE

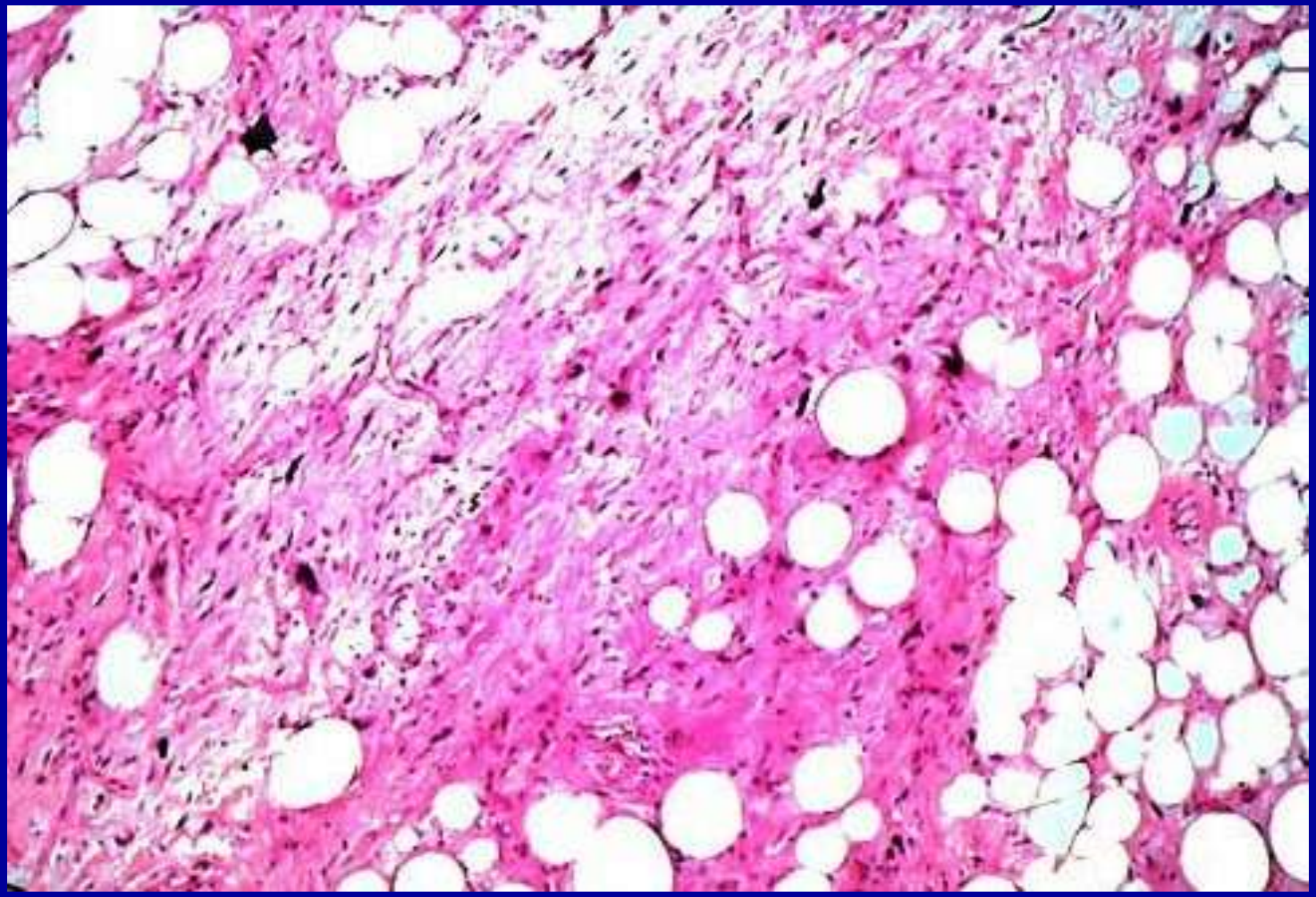
- NEOPLAZIJE
  - kao kod m.besike
- prekurzori
- primarni kanceri uretre- manje od 1% svih urotelnih malignoma
- simptomi – opstruktivni

PATOLOGIJA SEMENE VRPCE , PARATESTIKULARNOG TKIVA

- INFLAMACIJA
- infekcije
- reakcije po tipu stranog tela
- malakoplakija
- Buerger bolest
- sarkoidosis

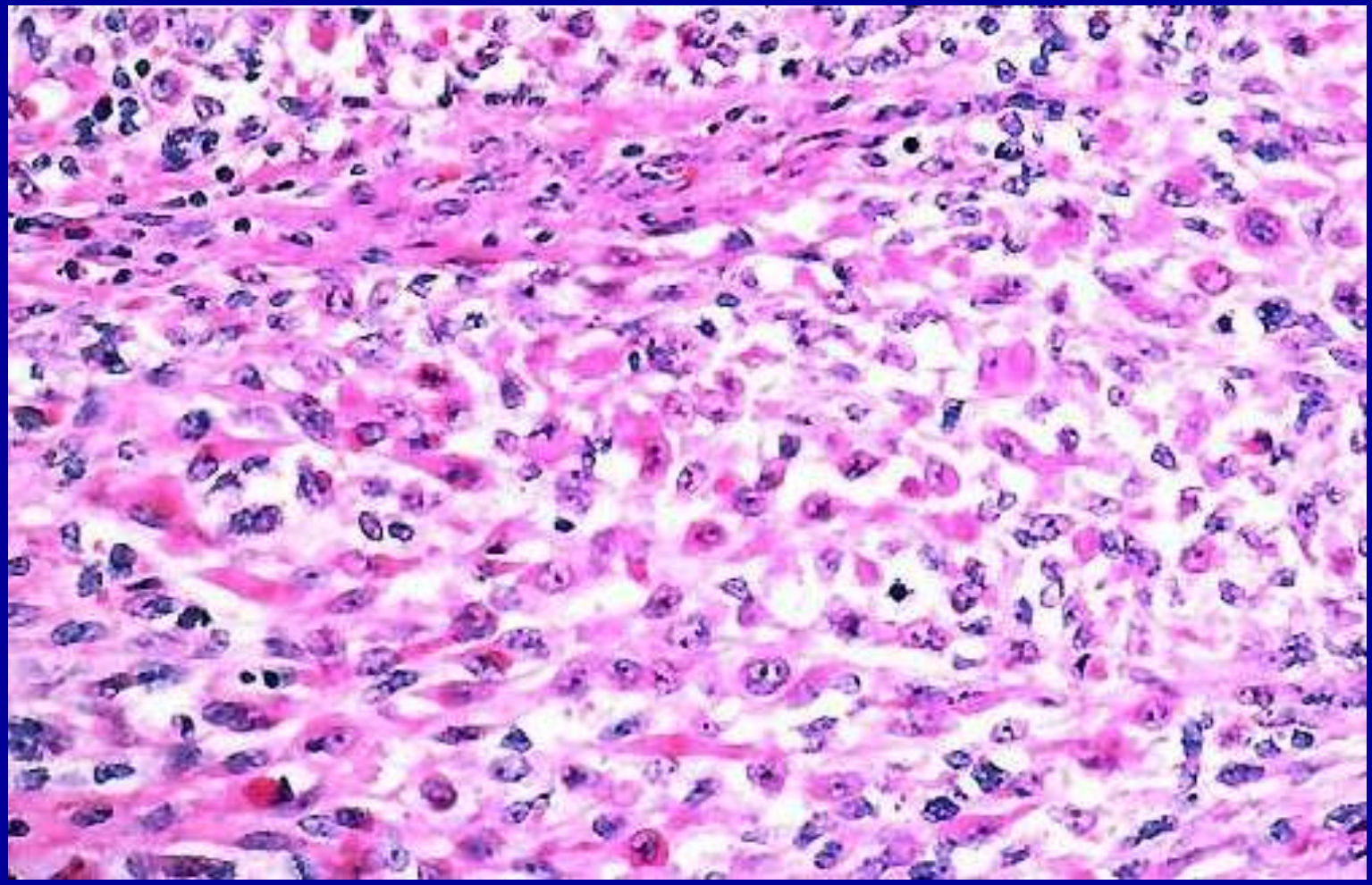
PATOLOGIJA SEMENE VRPCE , PARATESTIKULARNOG TKIVA

LIPOSARCOMA



PATOLOGIJA SEMENE VRPCE , PARATESTIKULARNOG TKIVA

RABDOMIOSARKOM



PATOLOGIJA TESTISA I EPIDIDIMISA

- BENIGNE LEZIJE TESTISA I ADNEKSA
- EPIDIDYMITIS-najčešća intraskrotalna inflamacija. -nespecificni akutni, hronični
- tuberkolozni –
- ORCHITIS – akutni i hroničn, cesto udruzen sa epididimitisom
- mumps orchitis 30% parotitisa-edem, akutna inflamacija i degeneracija germ celija.

PATOLOGIJA TESTISA I EPIDIDIMISA

- granulomatozni orhitis-tuberkulozni, od epididimisa
- sifilisni
- nespecificni
- PERIORCHITIS
- nodularni ili reaktivni –jedan, vise cvorica t.albugineje. i vaginalis.
- Vasitis nodosa
- Meconium periorchitis

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

T – Primary tumor Except for pTis and pT4, where radical orchiectomy is not always necessary for classification purposes, the extent of the primary tumor is classified after radical orchiectomy; see pT. In other circumstances, TX is used if no radical orchiectomy has been performed

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

N – Regional Lymph Nodes NX Regional lymph nodes cannot be assessed N0 No regional lymph node metastasis N1 Metastasis with a lymph node mass 2 cm or less in greatest dimension or multiple lymph nodes, none more than 2 cm in greatest dimension N2 Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension, or multiple lymph nodes, any one mass more than 2 cm but not more than 5 cm in greatest dimension N3 Metastasis with a lymph node mass more than 5 cm in greatest dimension

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

M – Distant Metastasis MX Distant metastasis cannot be assessed M0 No distant metastasis M1 Distant metastasis M1a Non-regional lymph node(s) or lung M1b

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

Other sites pTNM Pathological Classification pT – Primary Tumor pTX Primary tumor cannot be assessed (See T–Primary Tumor, above) pT0 No evidence of primary tumor (e.g. histologic scar in testis) pTis Intratubular germ cell neoplasia (carcinoma in situ) pT1 Tumor limited to testis and epididymis without vascular/lymphatic invasion; tumor may invade tunica albuginea but not tunica vaginalis pT2 Tumor limited to testis and epididymis with vascular/lymphatic invasion, or tumor extending through tunica albuginea with involvement of tunica vaginalis pT3 Tumor invades spermatic cord with or without vascular/lymphatic invasion pT4 Tumor invades scrotum with or without vascular/lymphatic invasion

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

pN – Regional Lymph Nodes pNX Regional lymph nodes cannot be assessed pN0 No regional lymph node metastasis pN1 Metastasis with a lymph node mass 2 cm or less in greatest dimension and 5 or fewer positive nodes, none more than 2 cm in greatest dimension pN2 Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or more than 5 nodes positive, none more than 5 cm; or evidence of extranodal extension of tumor pN3 Metastasis with a lymph node mass more than 5 cm in greatest dimension

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

S – Serum Tumor Markers SX Serum marker studies not available or not performed S0 Serum marker study levels within normal limits LDH hCG (mIU/ml) AFP (ng/ml) S1 <1.5 x N and <5, 000 and <1, 000 S2 1.5–10 x N or 5, 000–50, 000 or 1, 000–10, 000 S3 >10 x N or >50, 000 or >10, 000 N indicates the upper limit of normal for the LDH assay Stage I T1a N0 M0 G1

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

STAGE GROUPING

Stage 0	pTis	N0	M0	S0, SX	
Stage I	pT1-4	N0	M0	SX	
Stage IA	pT1	N0	M0	S0	
Stage IB	pT2	N0	M0	S0	
	pT3	N0	M0		S0
	pT4	N0	M0		S0
Stage IS	Any pT/TX	N0	M0	S1-3	
Stage II	Any pT/TX	N1-3	M0	SX	
Stage IIA	Any pT/TX	N1	M0		S0
	Any pT/TX	N1	M0		S1

WHO HISTOLOGICAL CLASSIFICATION OF TESTIS TUMORS

STAGE GROUPING

Stage IIB	Any pT/TX	N2	M0	S0
	Any pT/TX	N2	M0	S1
Stage IIC	Any pT/TX	N3	M0	S0
	Any pT/TX	N3	M0	S1
Stage III	Any pT/TX	Any N	M1, M1a	SX
Stage IIIA	Any pT/TX	Any N	M1, M1a	S0
	Any pT/TX	Any N	M1, M1a	S1
Stage IIIB	Any pT/TX	N1-3	M0	S2
	Any pT/TX	Any N	M1, M1a	S2
Stage IIIC	Any pT/TX	N1-3	M0	S3
	Any pT/TX	Any N	M1, M1a	S3
	Any pT/TX	Any N	M1b	Any S

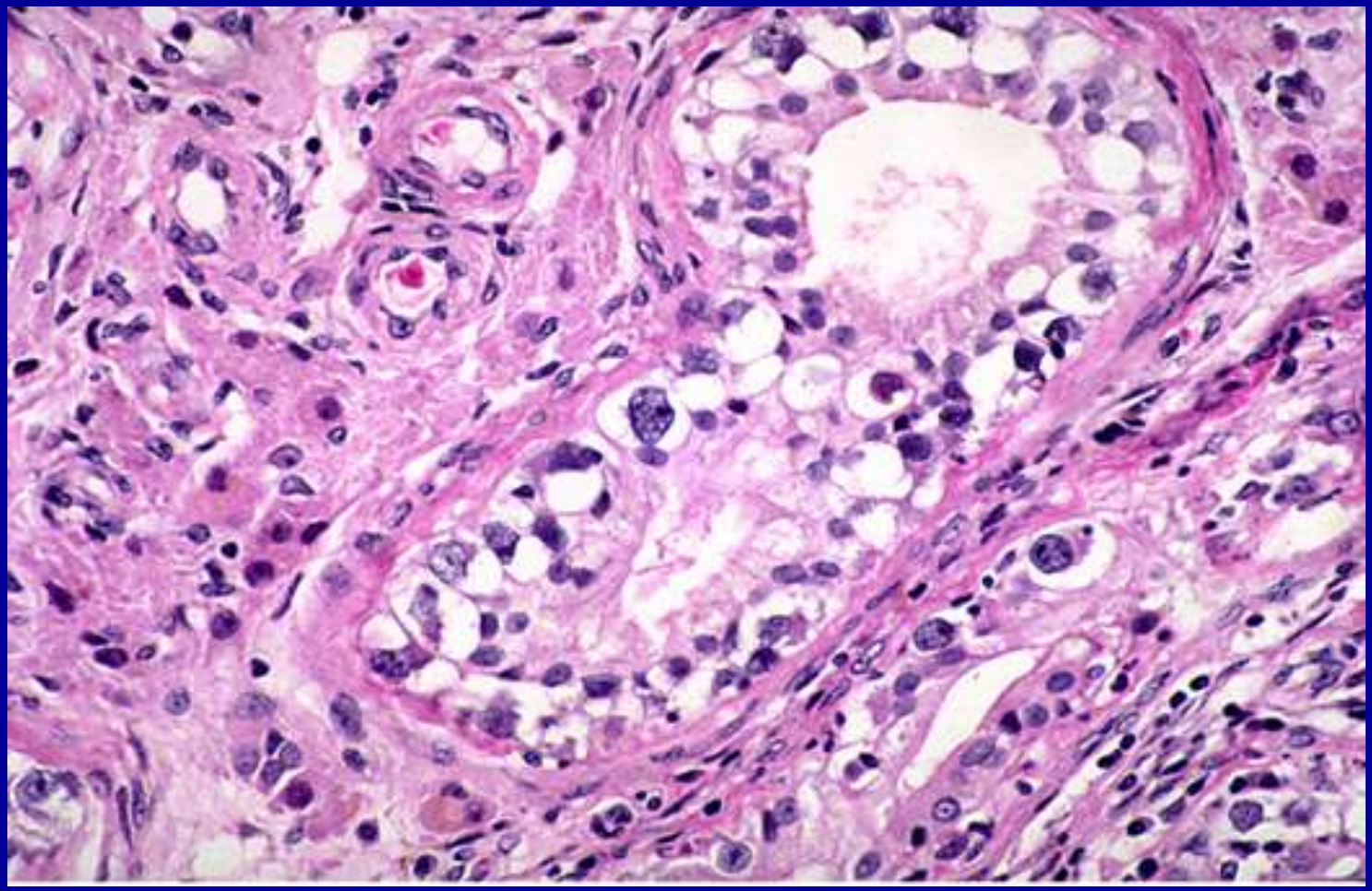
TUMORI TESTISA

Tumori germinativnih celija

- pocinju kao intratubularni maligni germinatni celijski i progrediraju u jedan ili vise bazicnih histoloskih tipova. Cine 94% testikularnih tumora.
- jedan histoloski tip 38%
- vise od jednog histoloskog tipa (62%)

TUMORI TESTISA

PREKURZORNA LEZIJA- INTRATUBULAR MALIGNANT GERM CELL

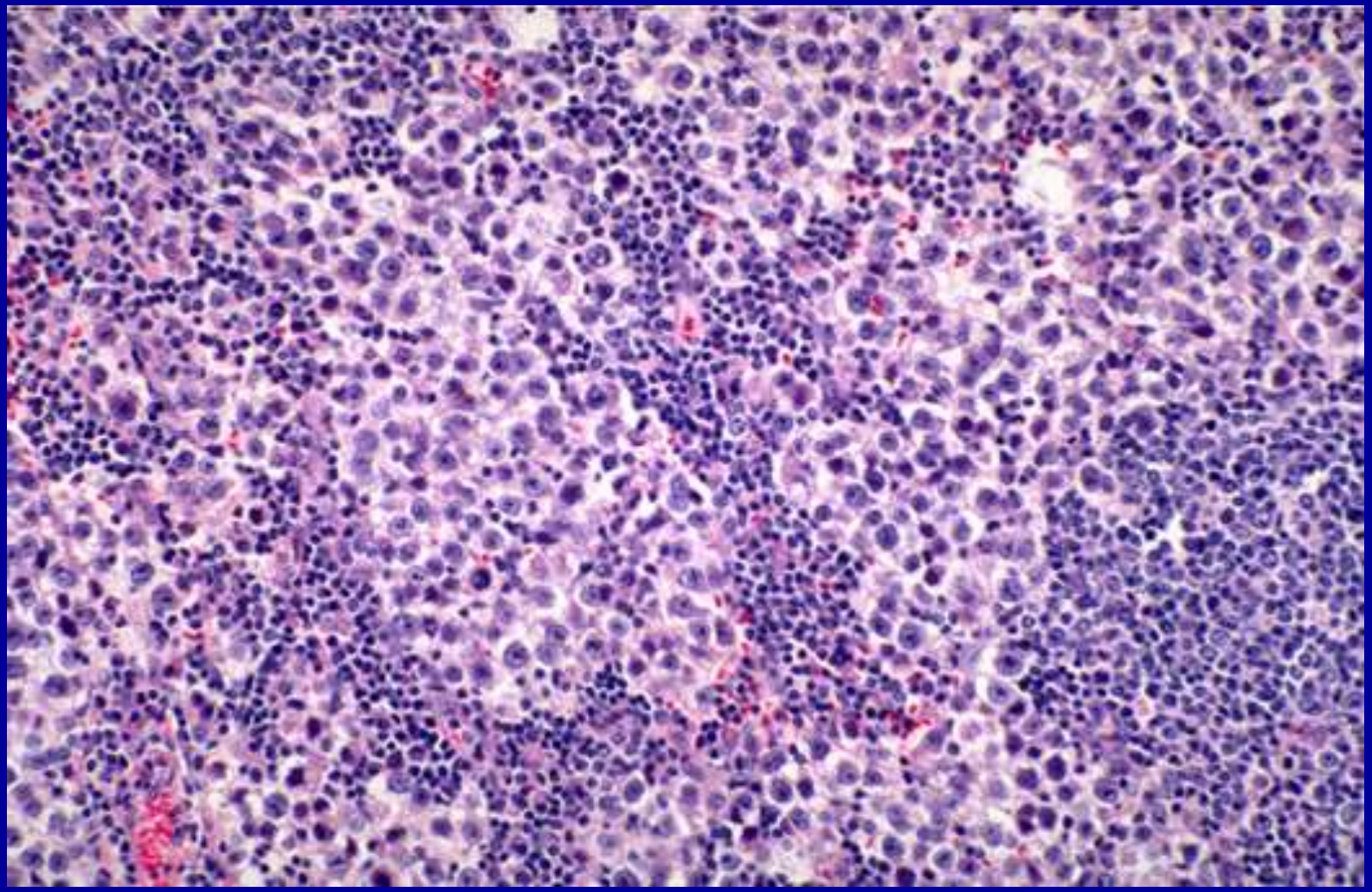


TUMORI TESTISA

SEMINOMA

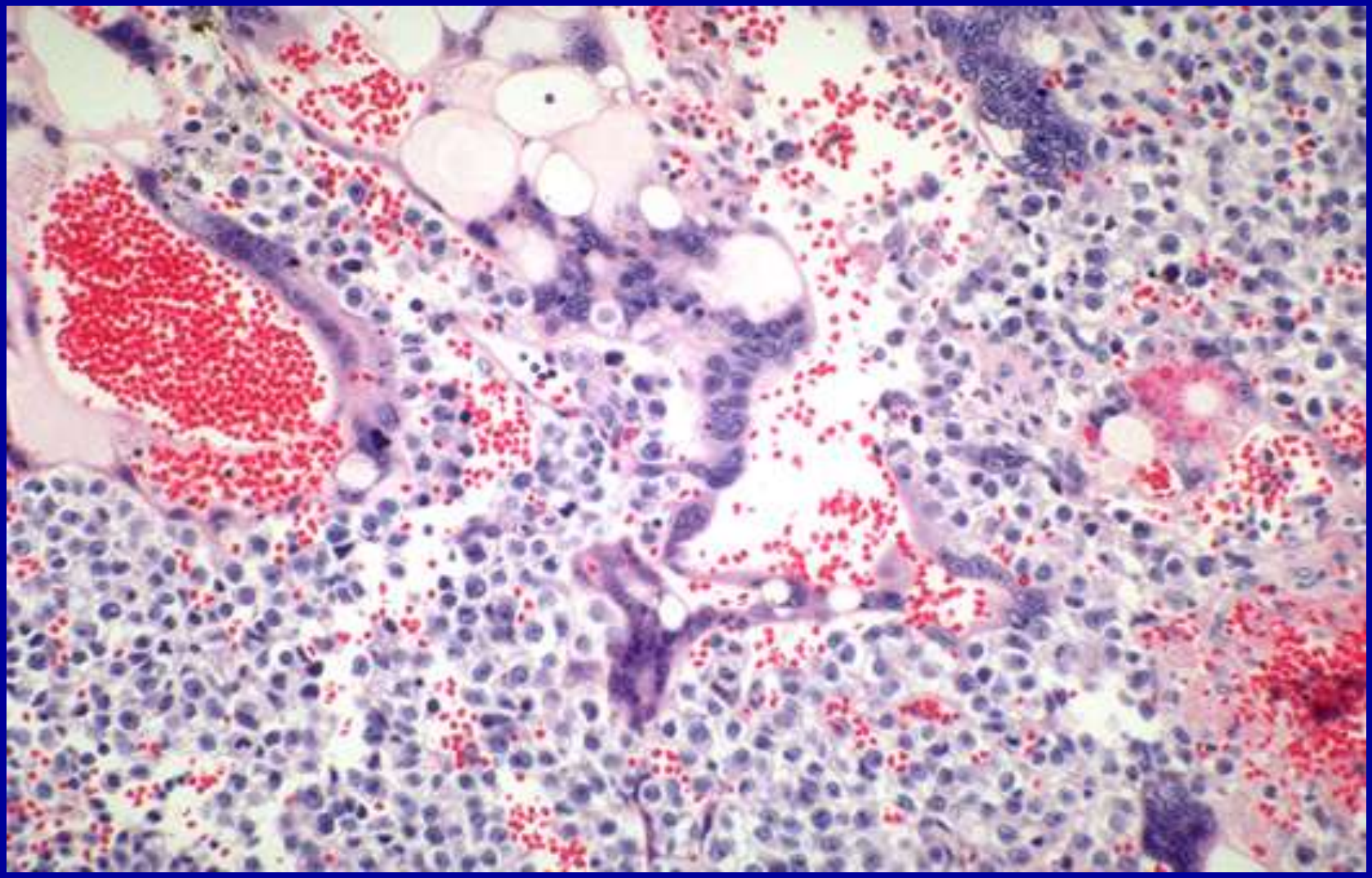
TUMORI TESTISA

SEMINOMA



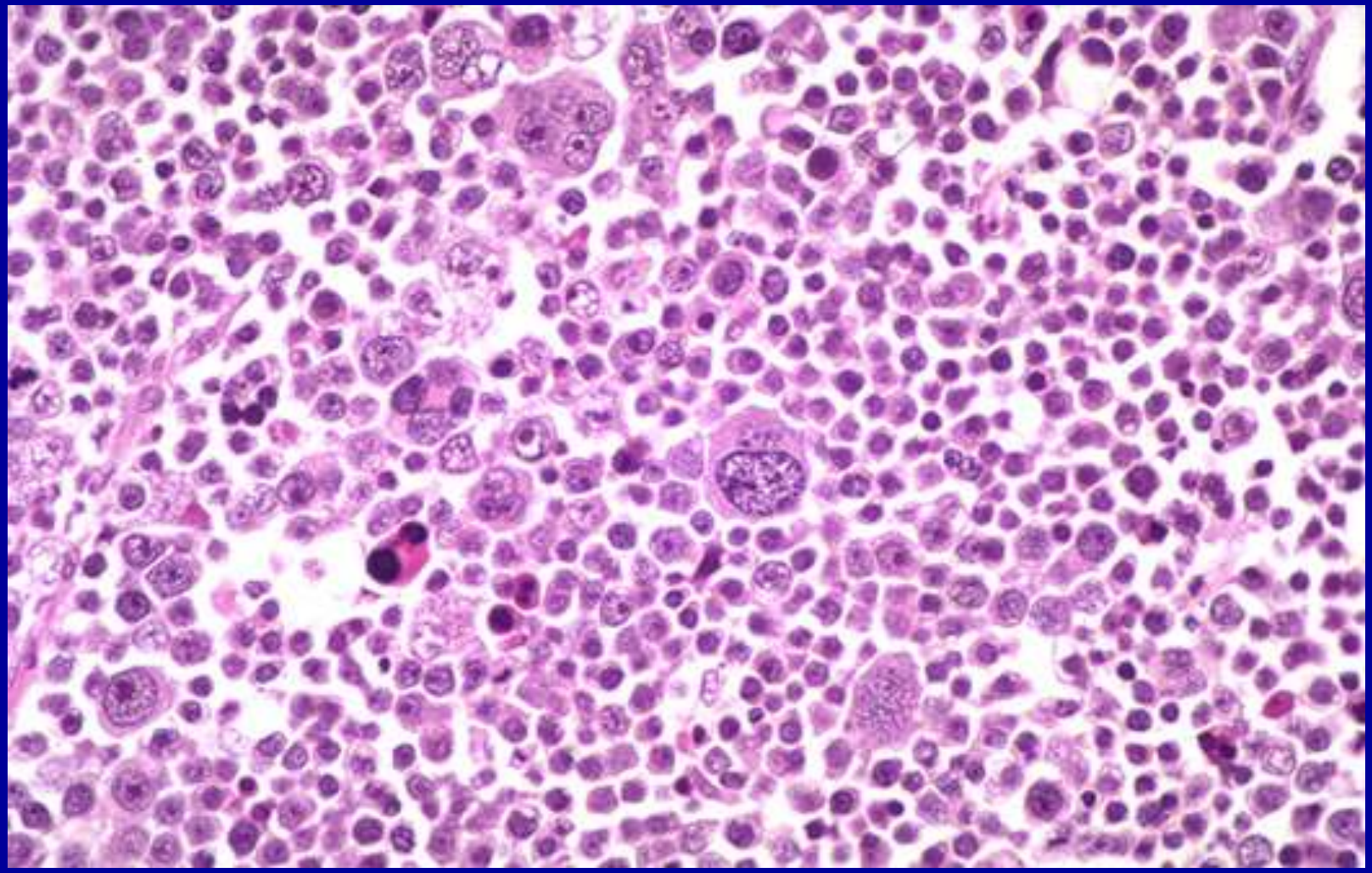
TUMORI TESTISA

SEMINOMA SA SINCICIOTROFOBLASTNIM CELIJAMA



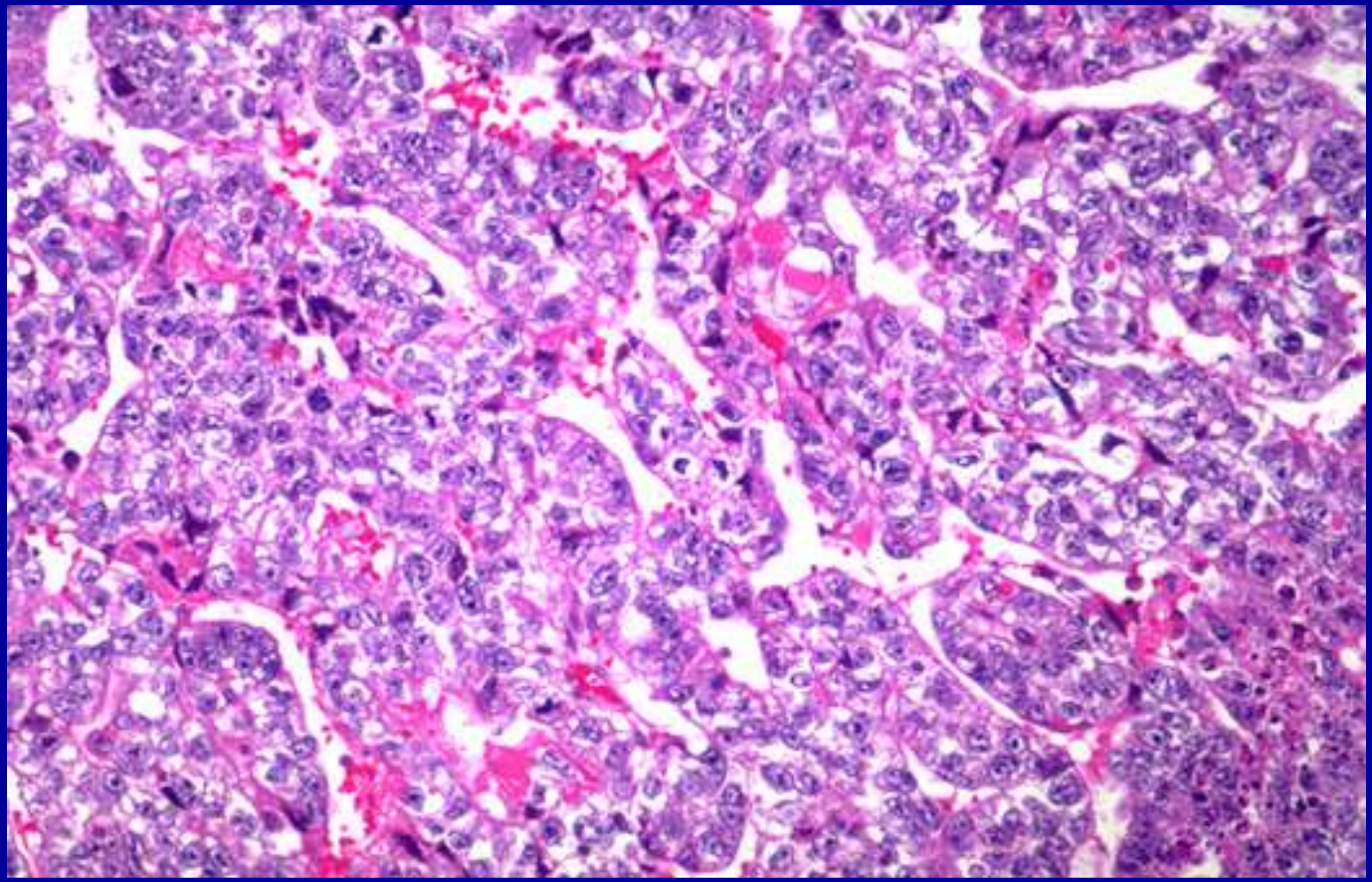
TUMORI TESTISA

SPERMATOCITICNI SEMINOM



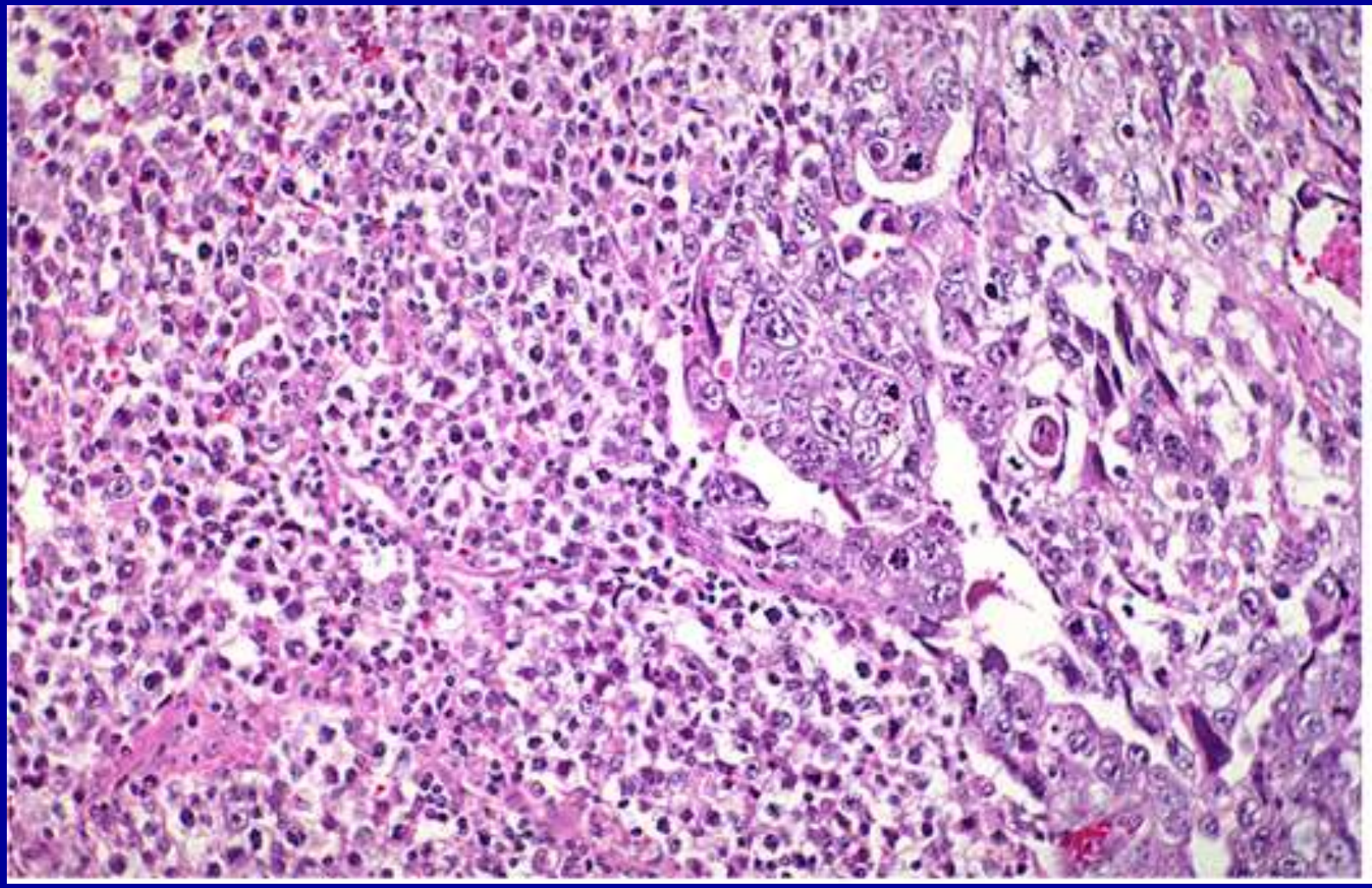
TUMORI TESTISA

EMBRIONALNI KARCINOM



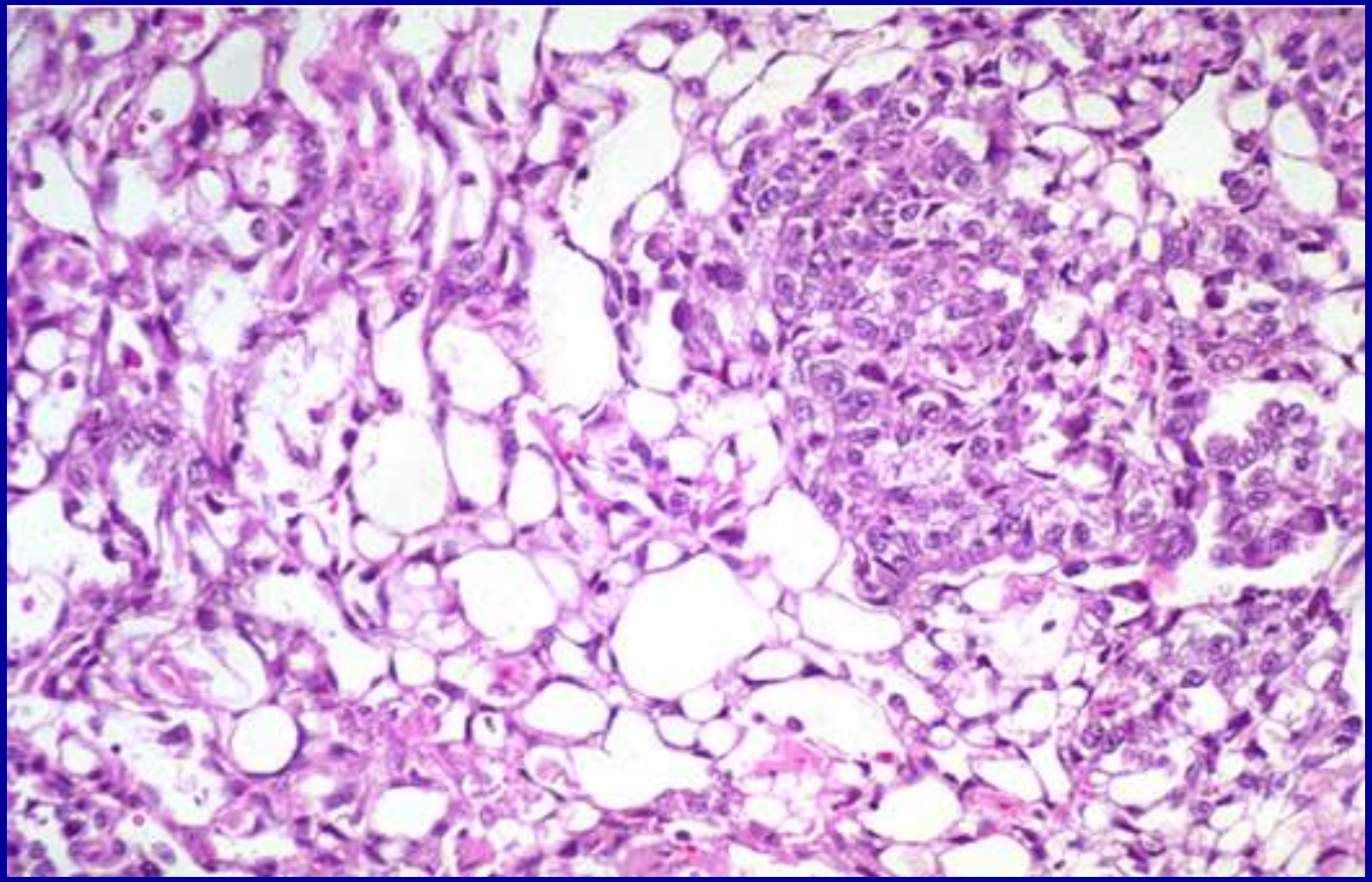
TUMORI TESTISA

EMBRIONALNI KARCINOM



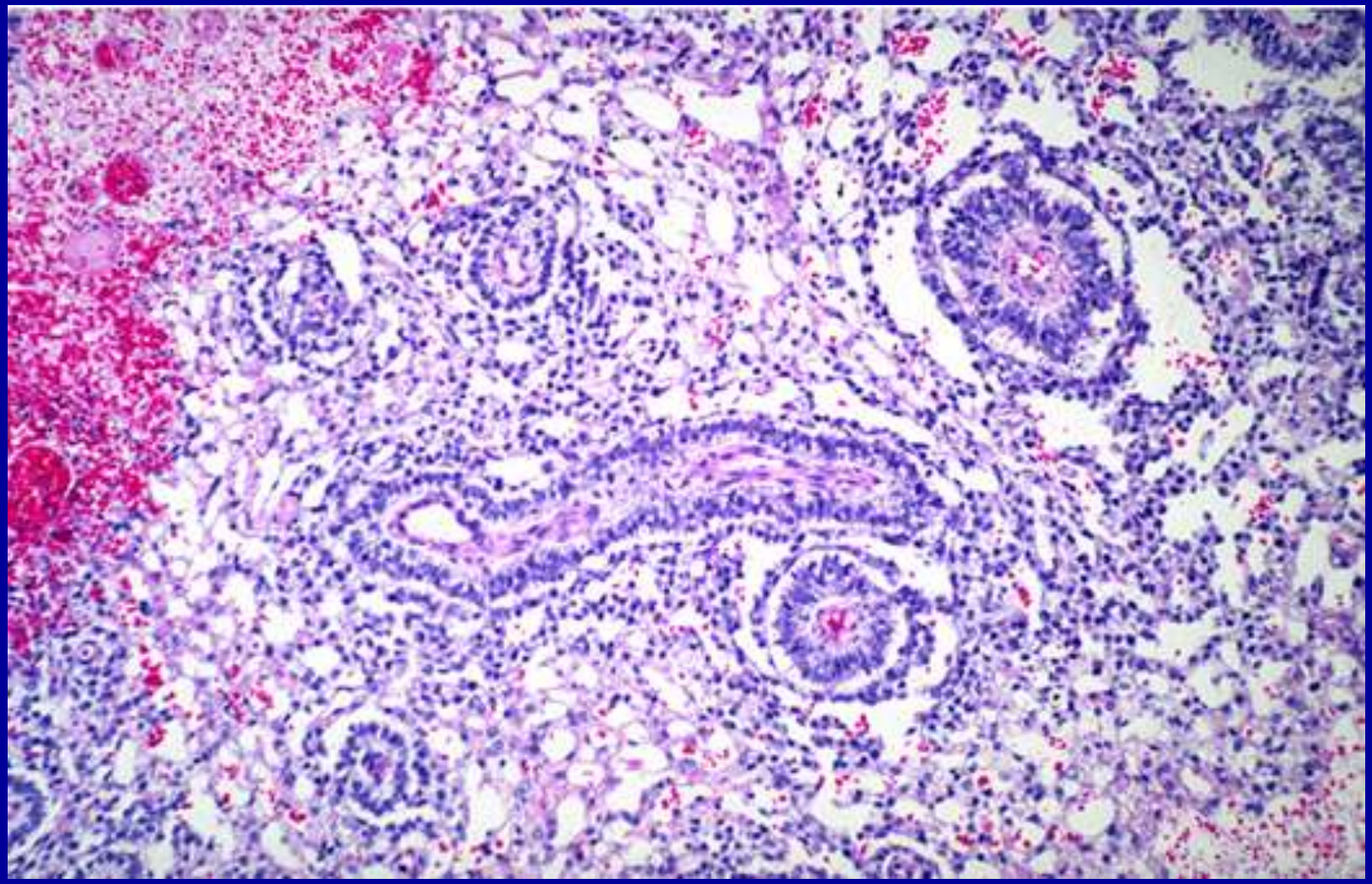
TUMORI TESTISA

YOLK SAC TUMOR



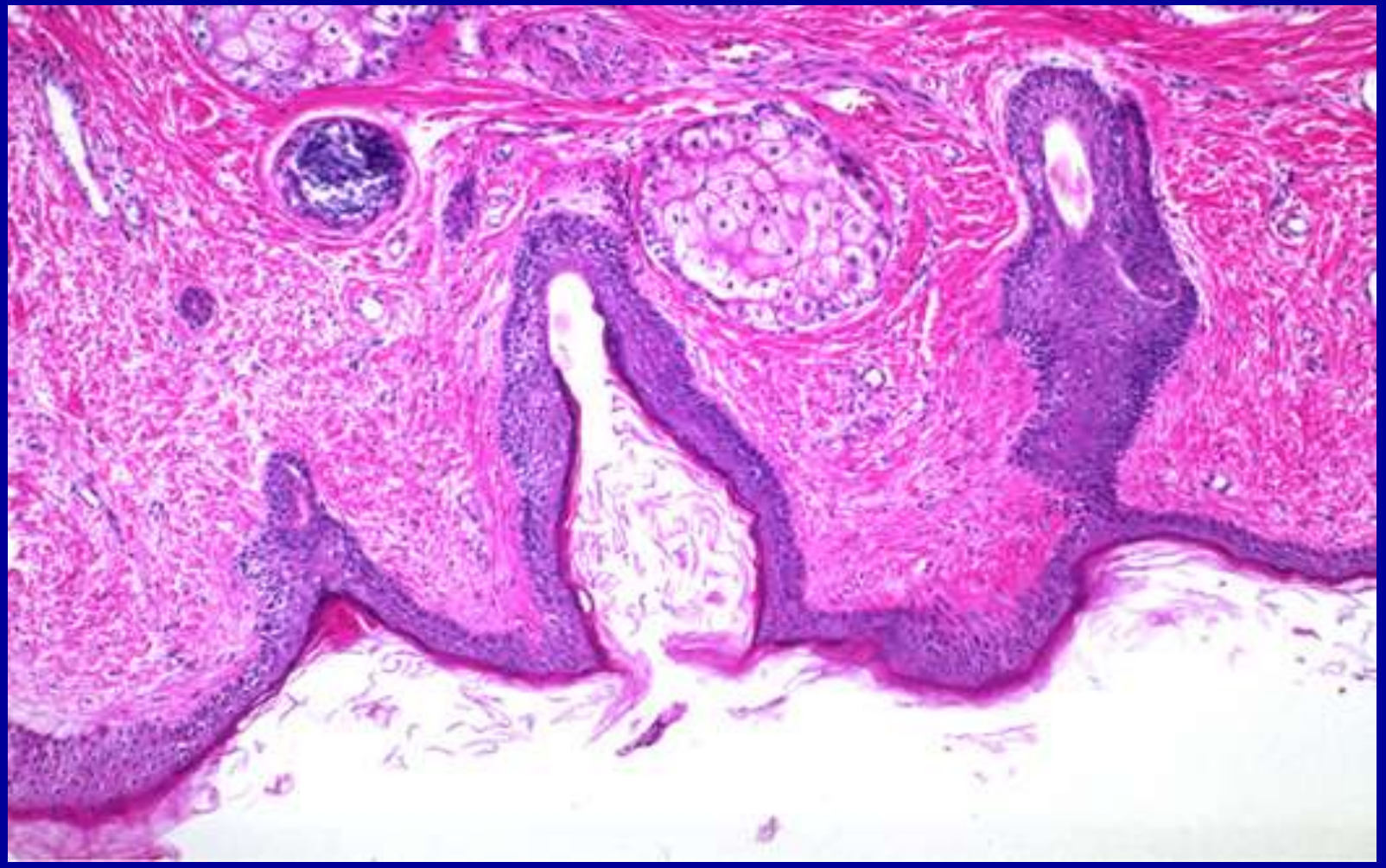
TUMORI TESTISA

YOLK SAC TUMOR



TUMORI TESTISA

DERMOIDNA CISTA

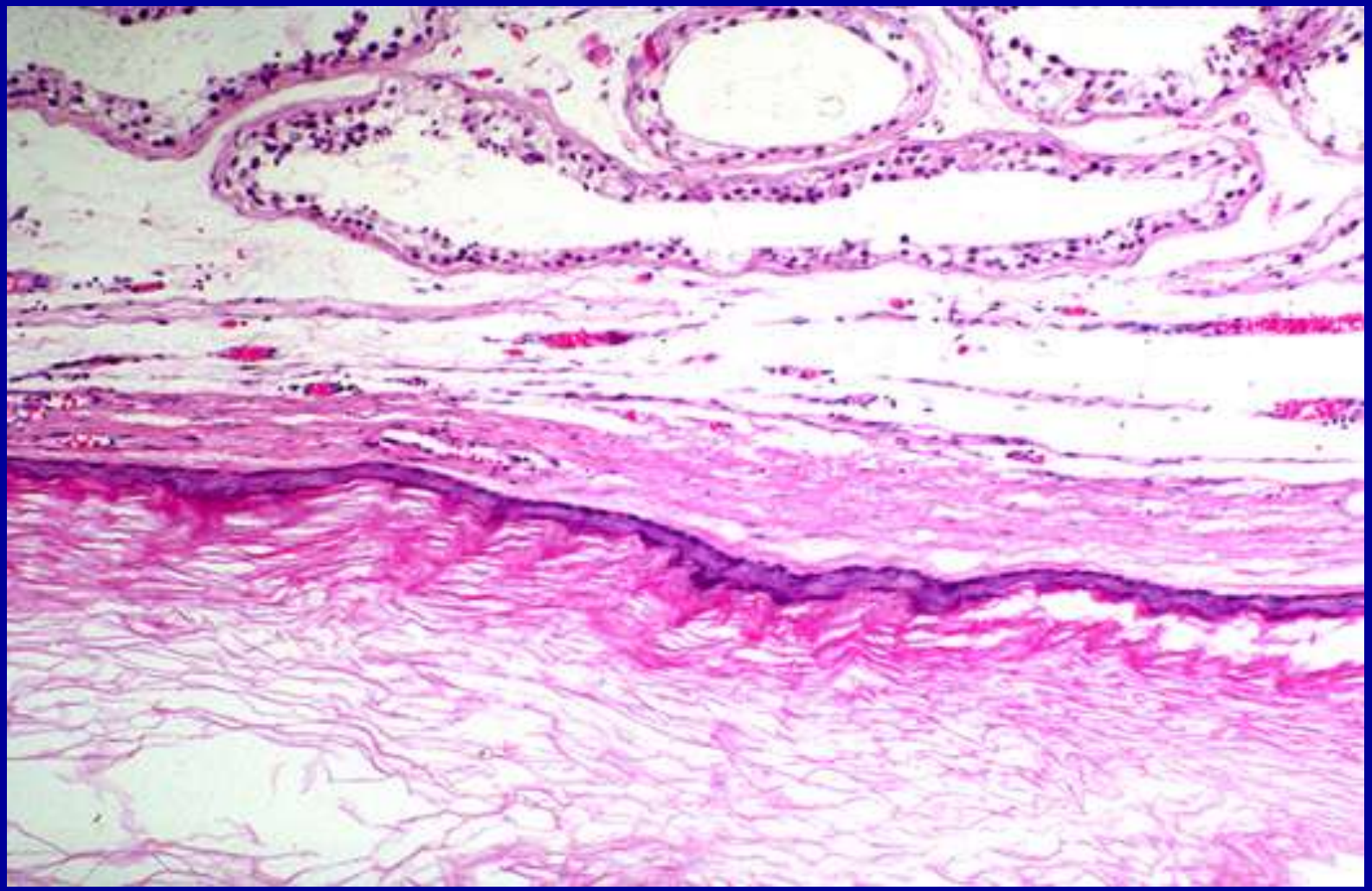


TUMORI TESTISA

EPIDERMALNA CISTA

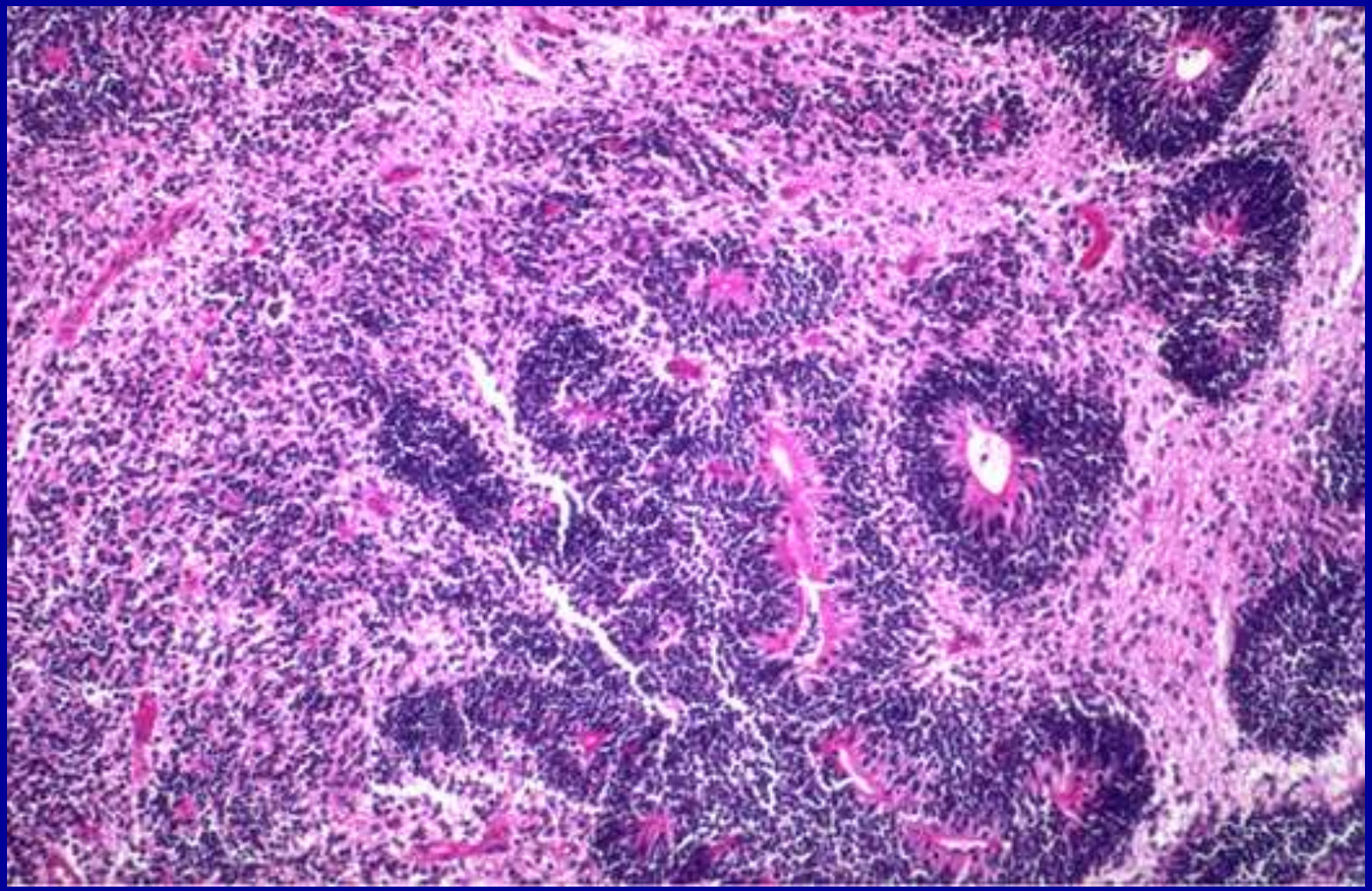
TUMORI TESTISA

EPIDERMALNA CISTA



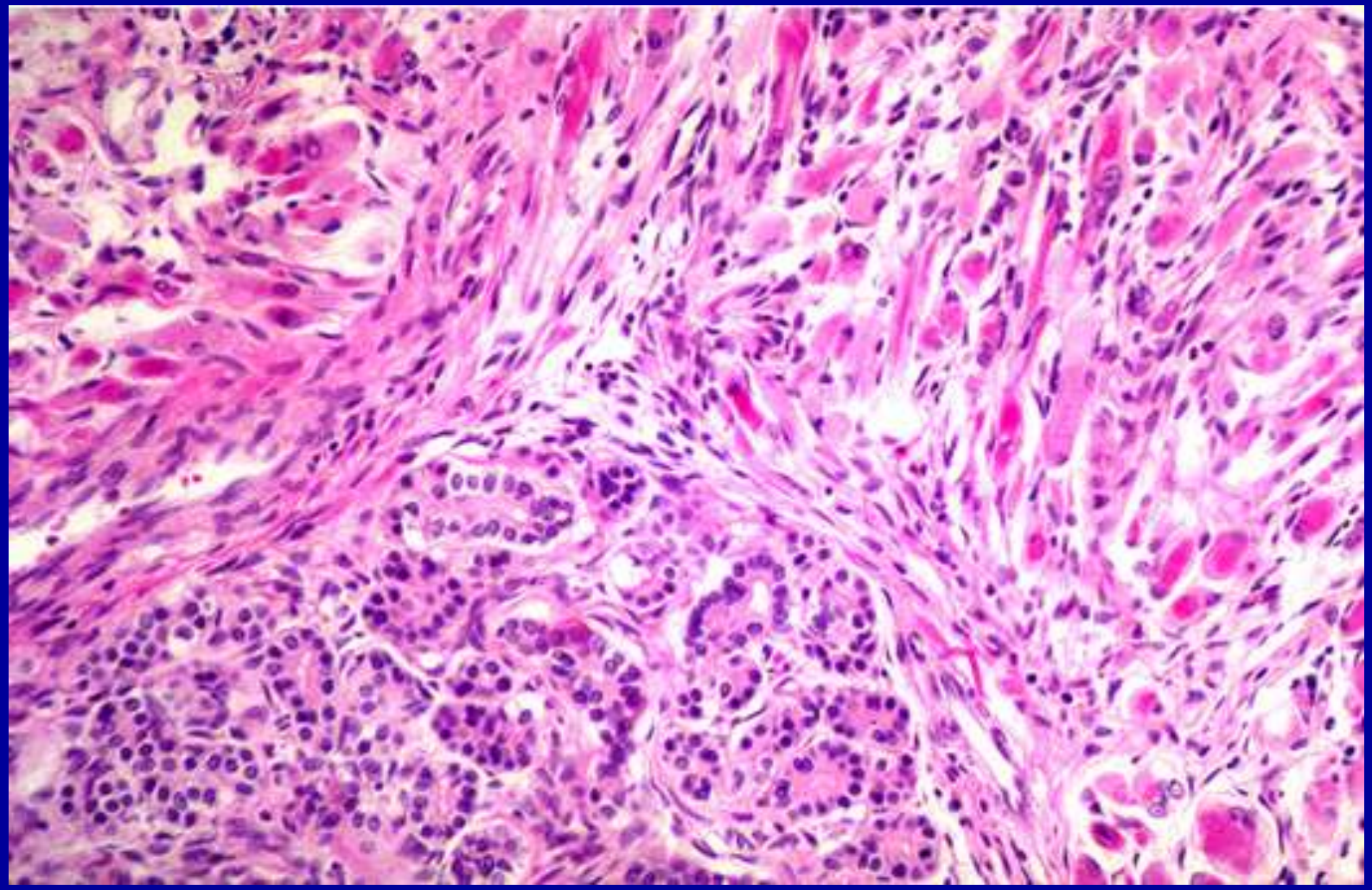
TUMORI TESTISA

TERATOMA



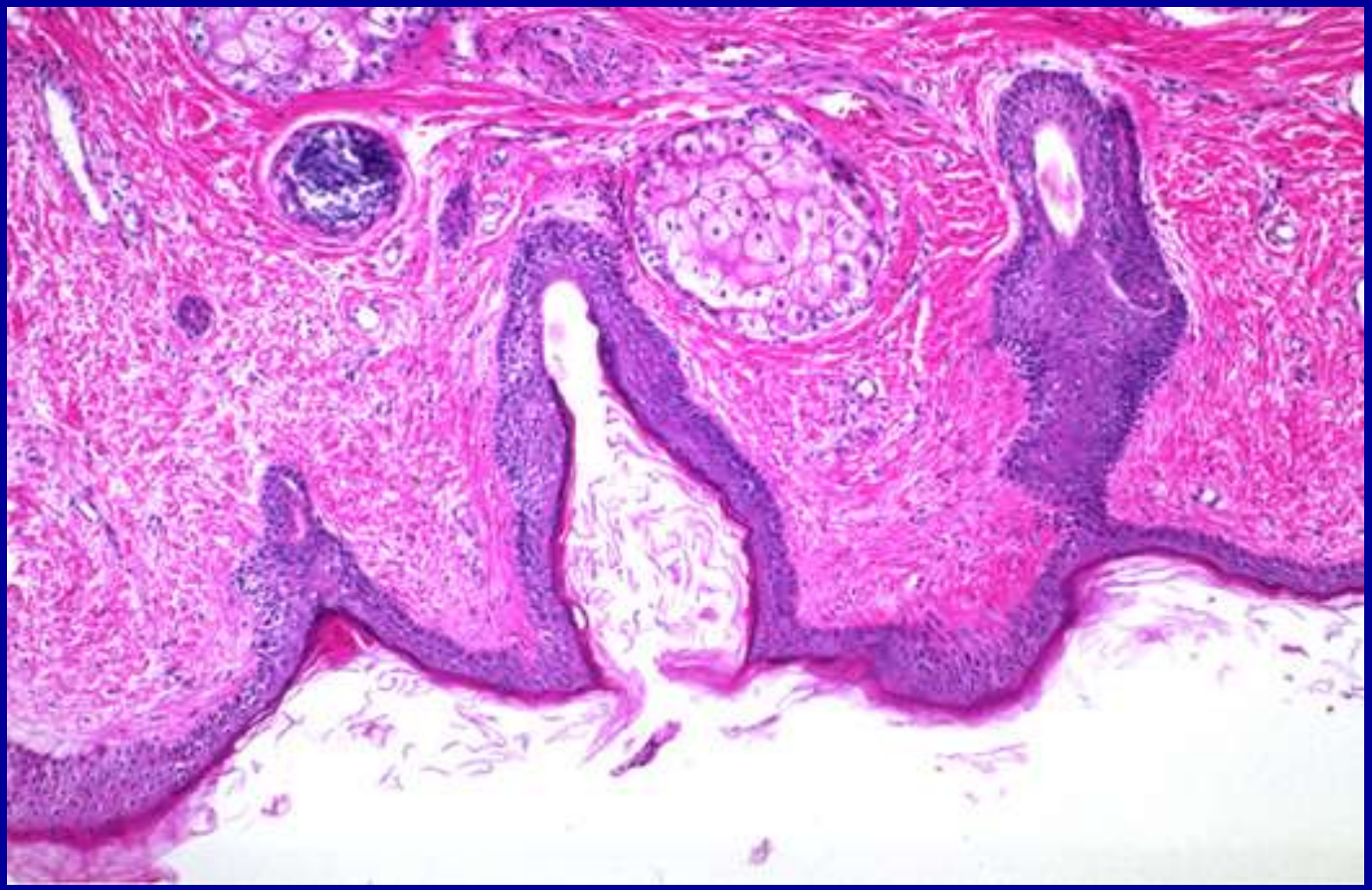
TUMORI TESTISA

TERATOMA



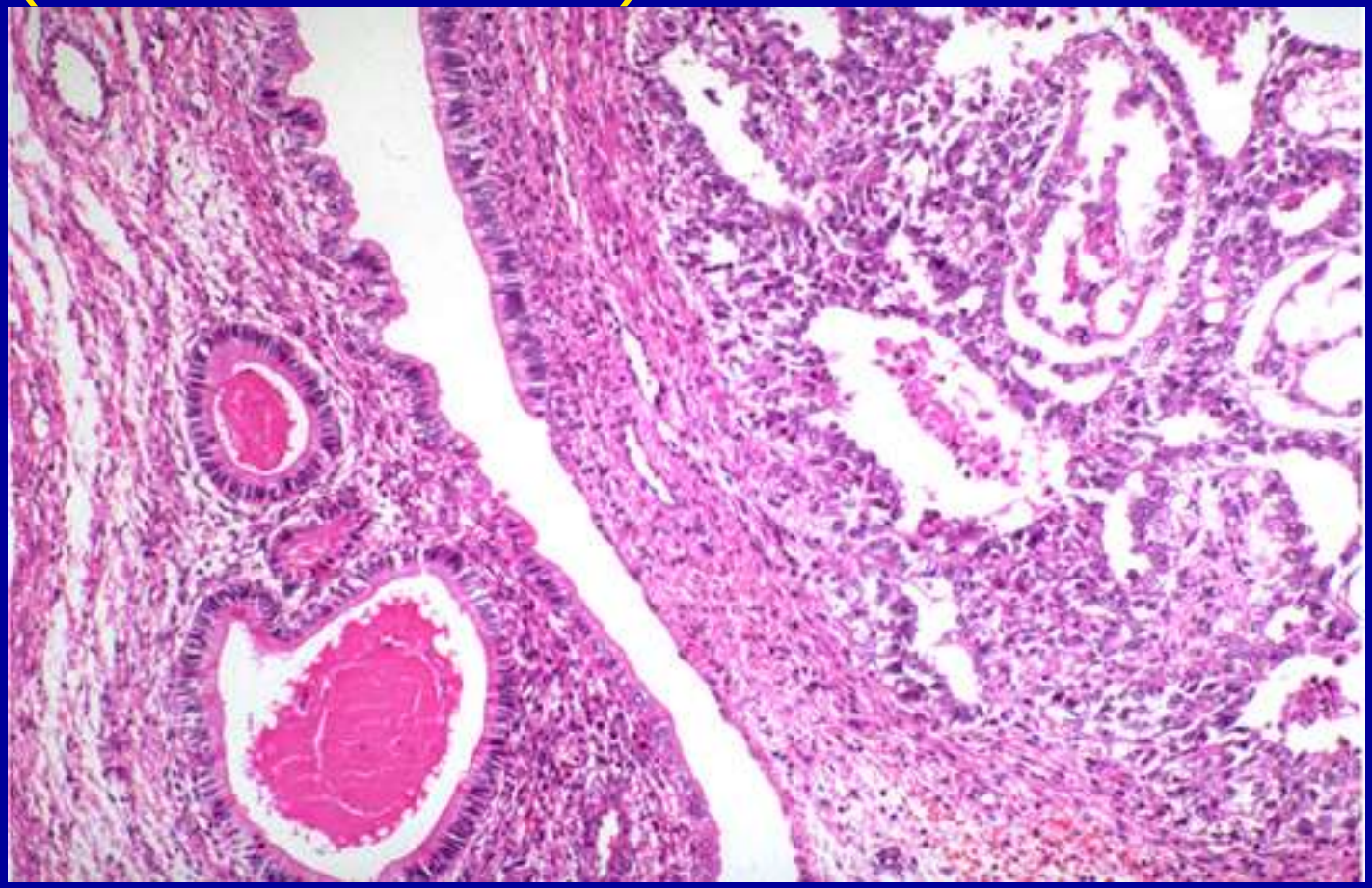
TUMORI TESTISA

DERMOIDNA CISTA



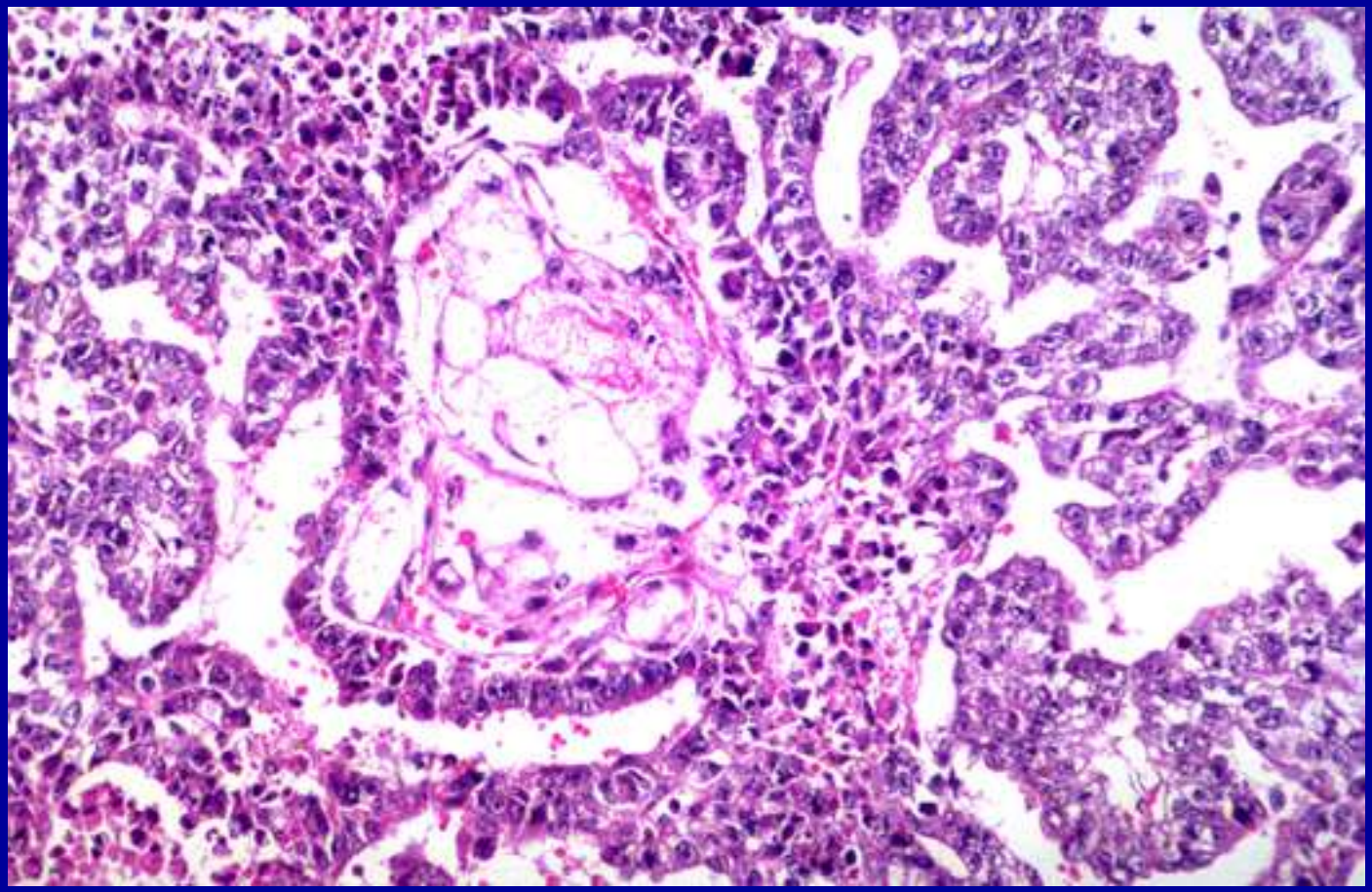
TUMORI TESTISA

TUMORI SA VISE HISTOLOSKIH TIPOVA (MIXED FORMS)



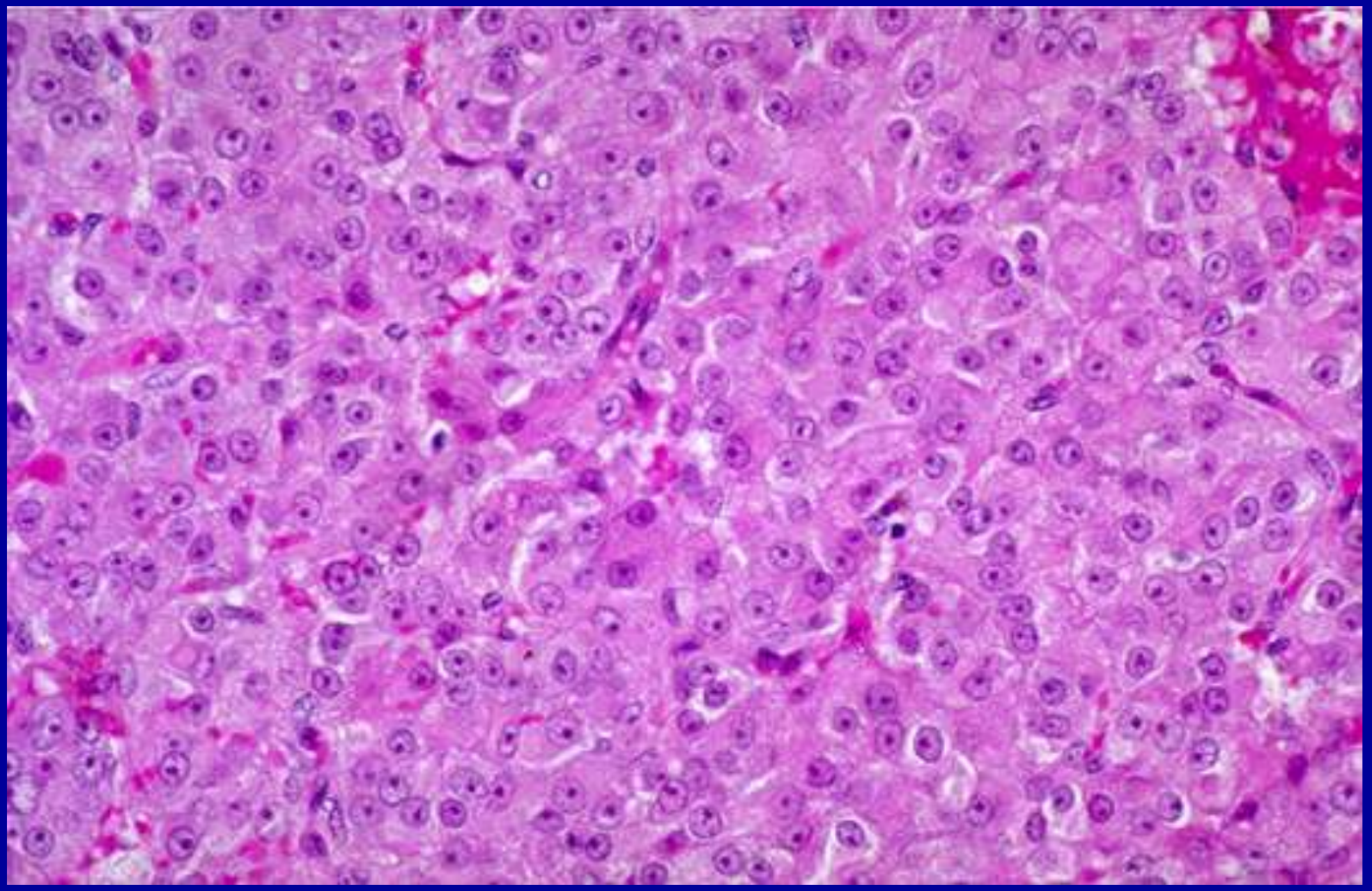
TUMORI TESTISA

TUMORI SA VISE HISTOLOSKIH TIPOVA (MIXED FORMS)



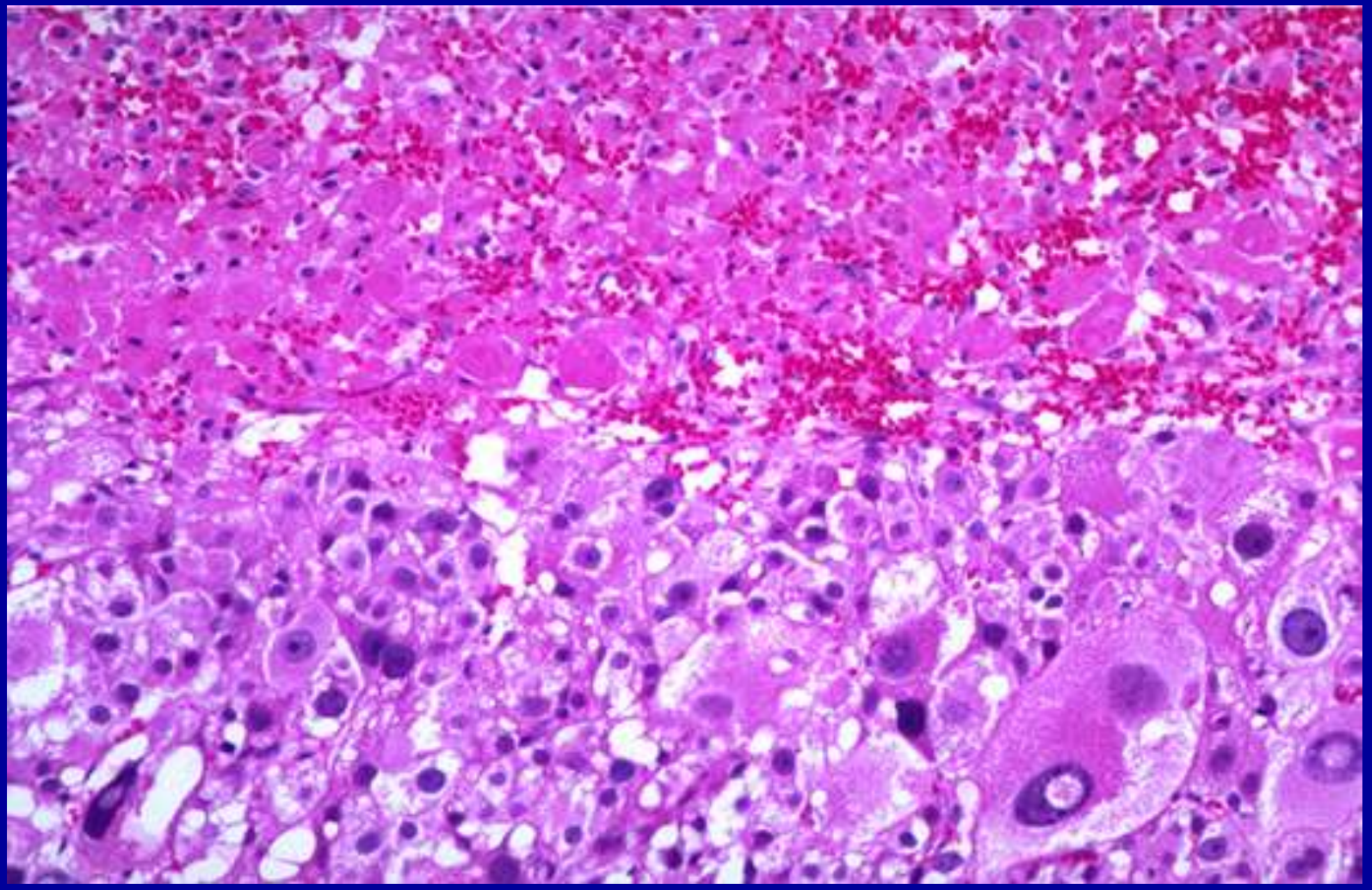
TUMORI TESTISA

LEYDIG CELL TUMOR



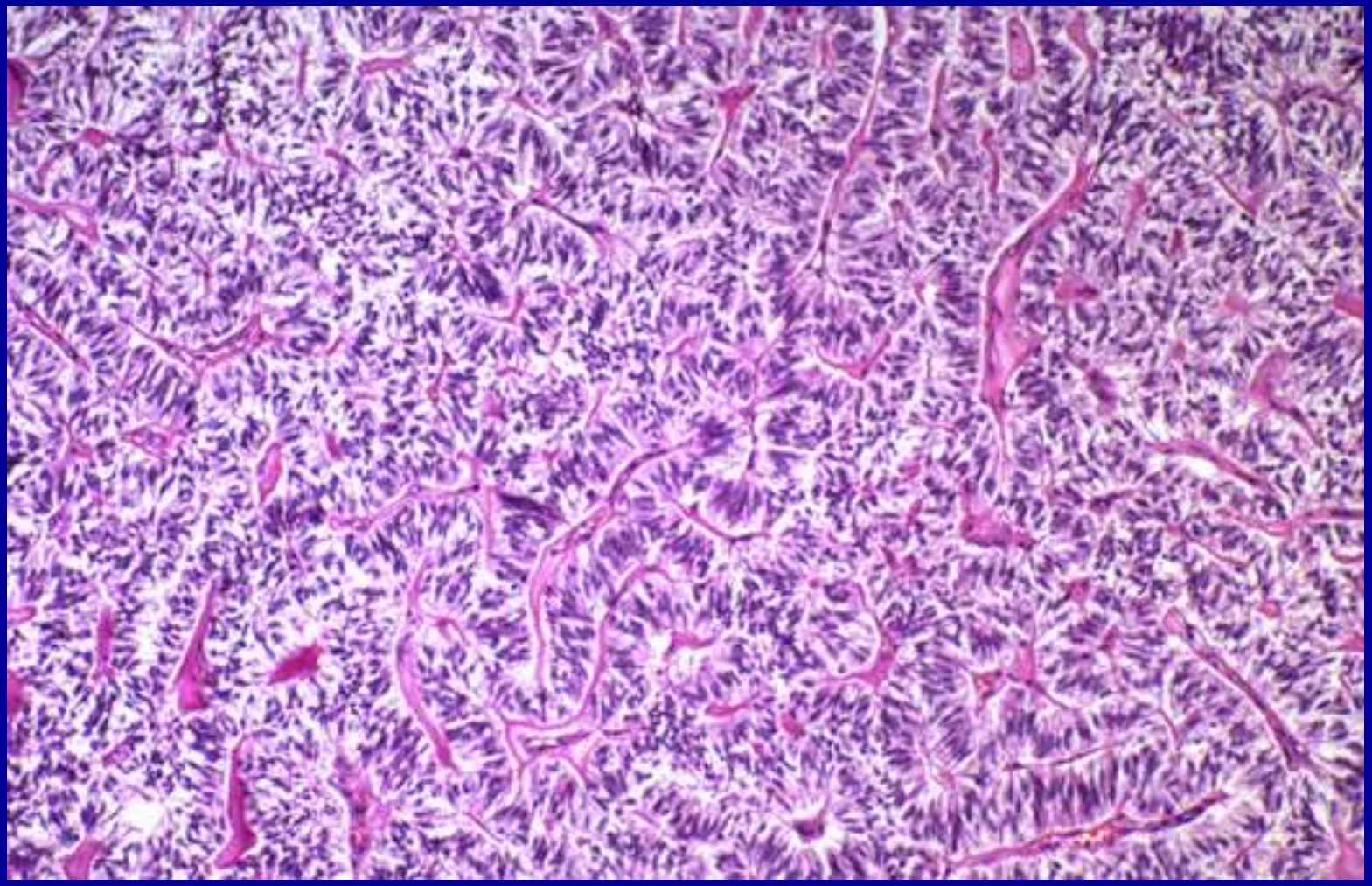
TUMORI TESTISA

LEYDIG CELL TUMOR



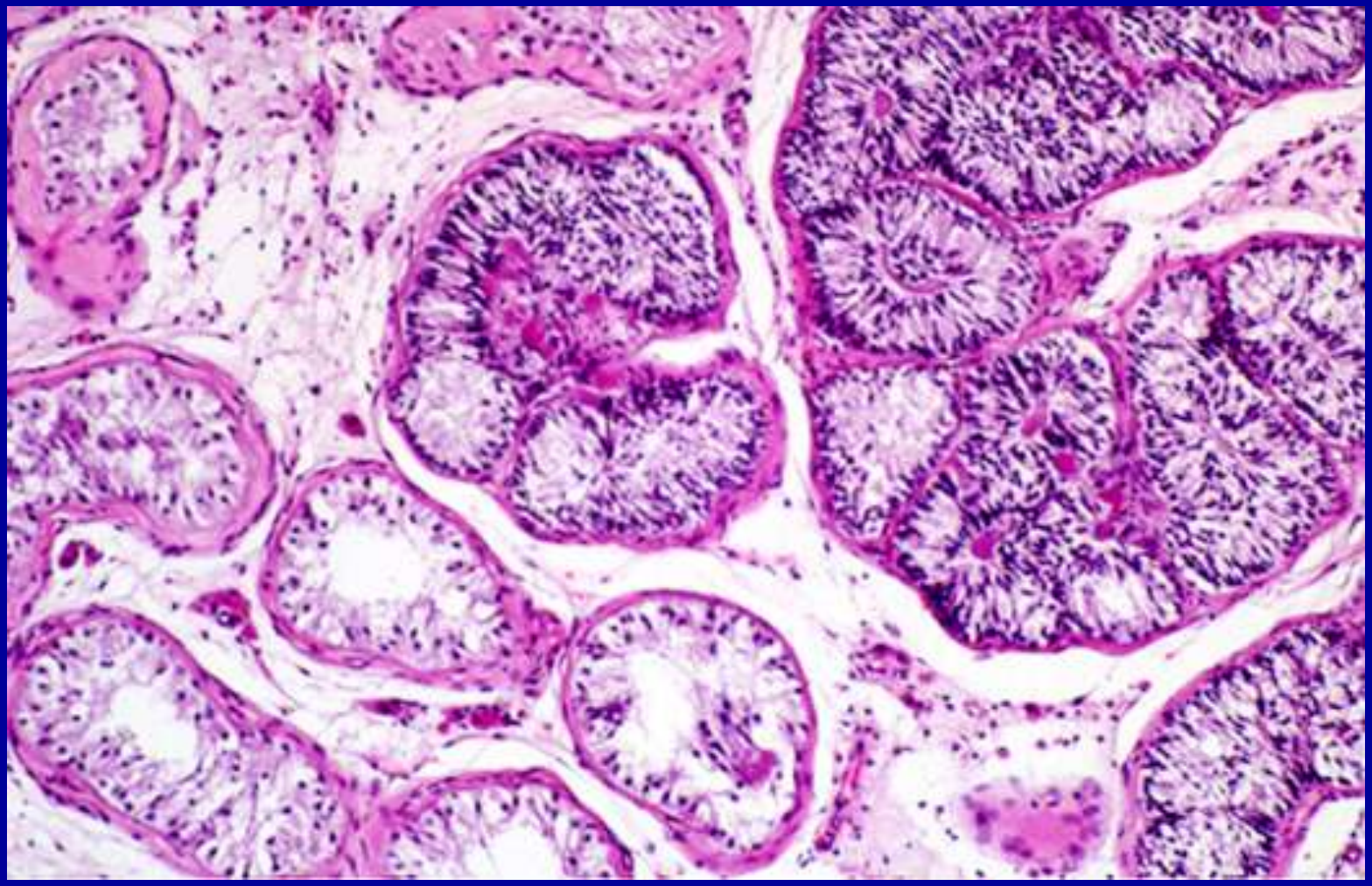
TUMORI TESTISA

SERTOLI CELL TUMOR



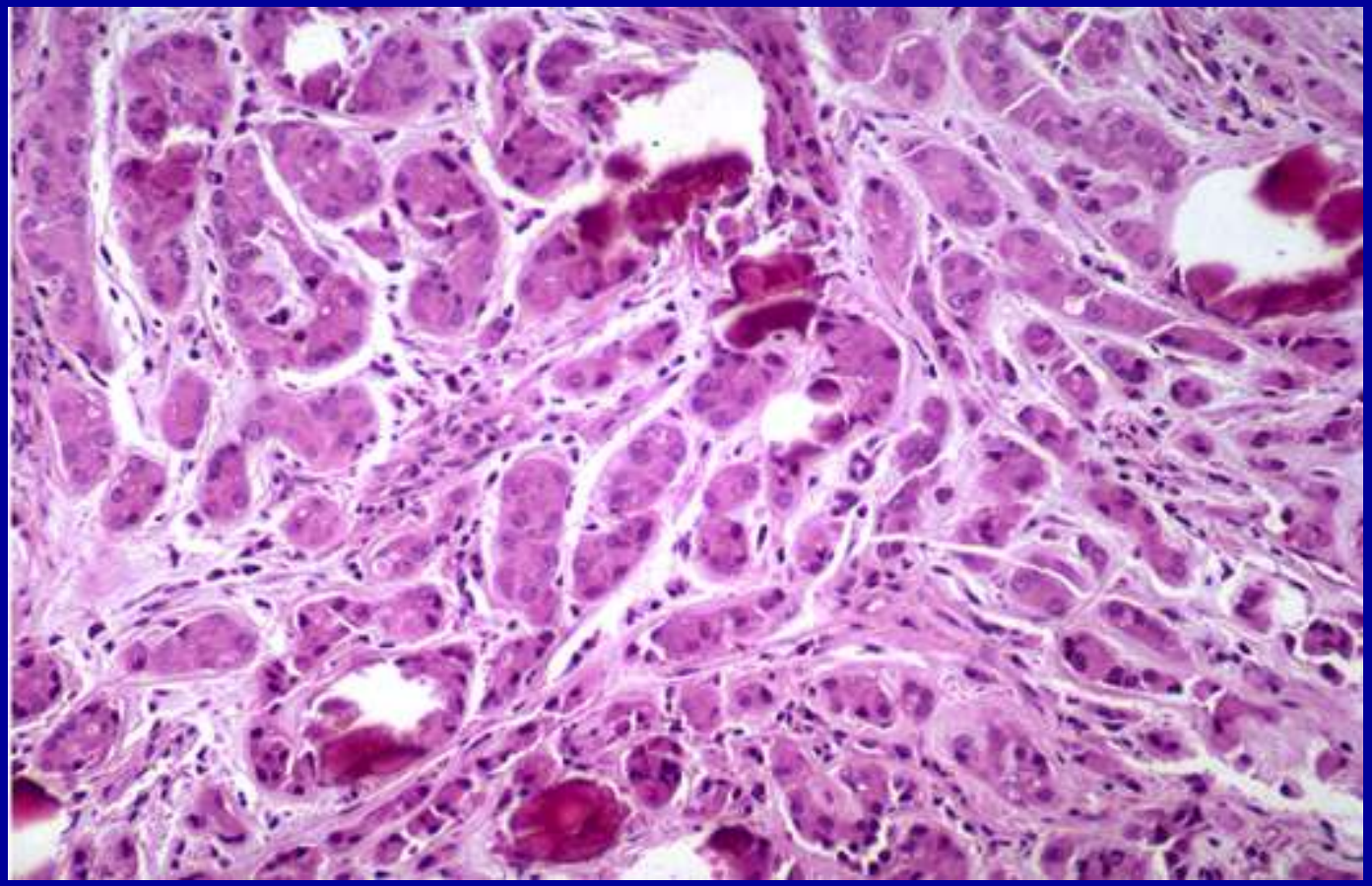
TUMORI TESTISA

SERTOLI CELL TUMOR



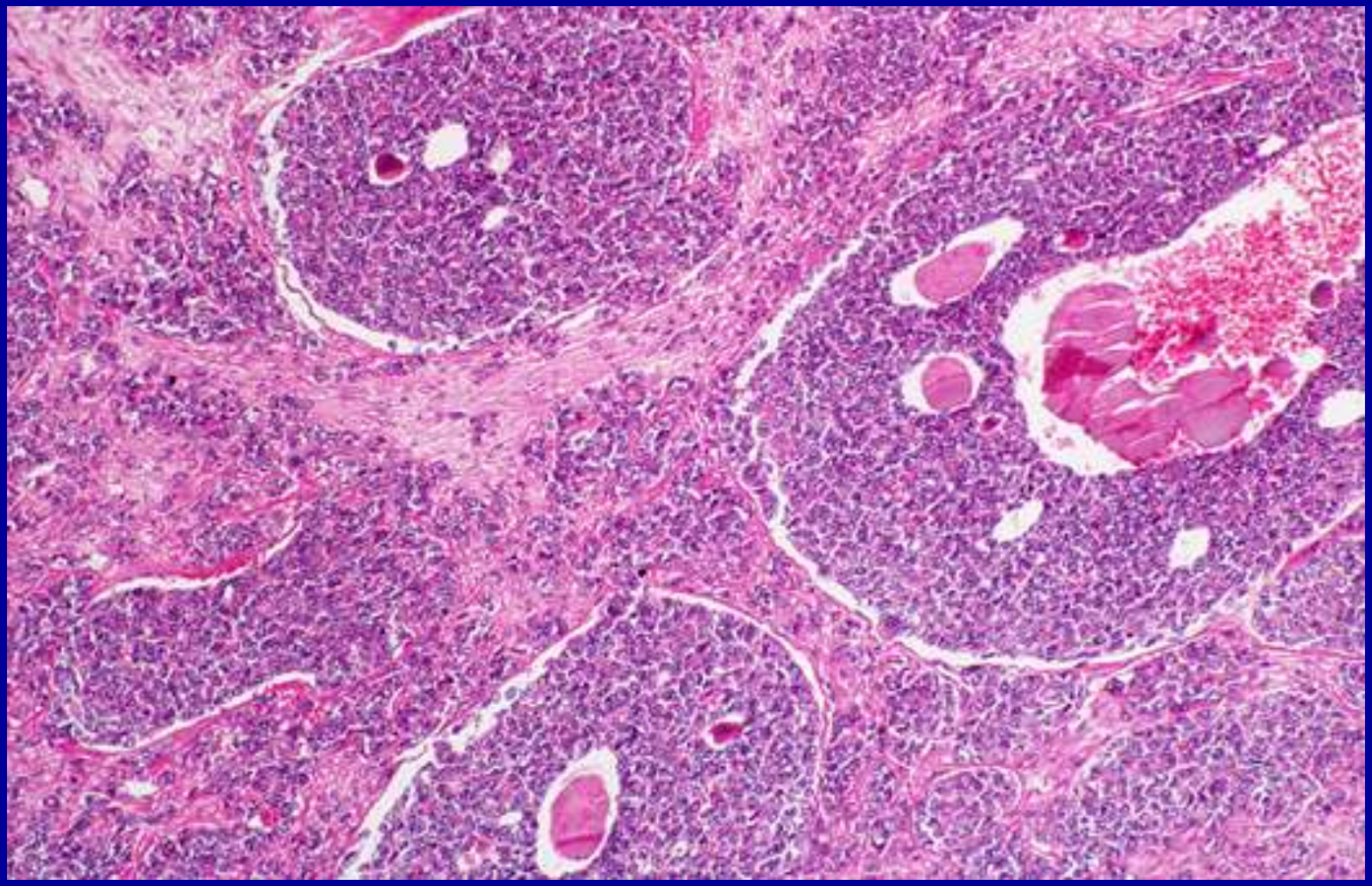
TUMORI TESTISA

VARIANT - LARGE CELL CALCIFYING SERTOLI CELL TUMORS



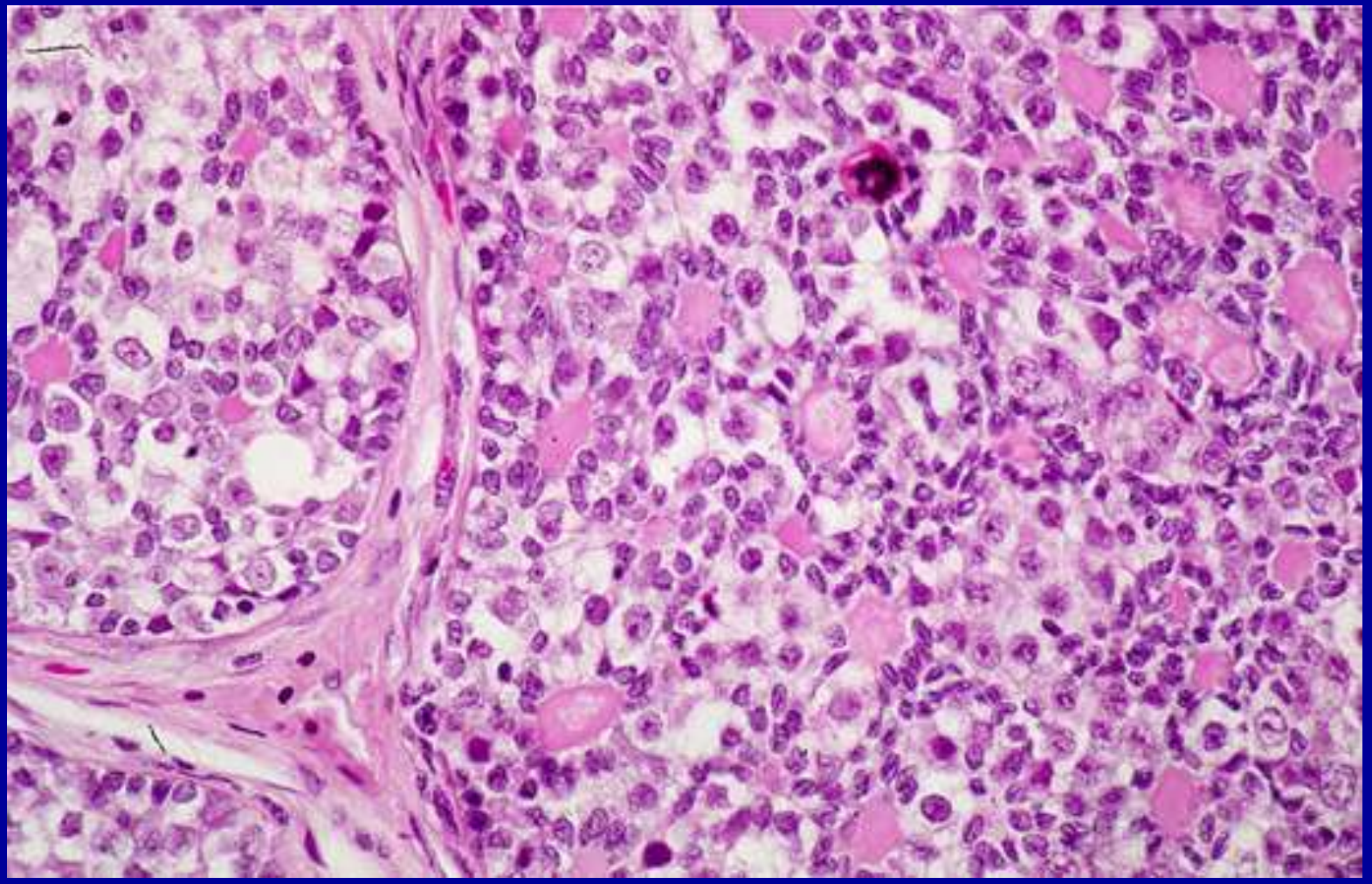
TUMORI TESTISA

GRANULOSA CELL TUMOR, ADULT TYPE



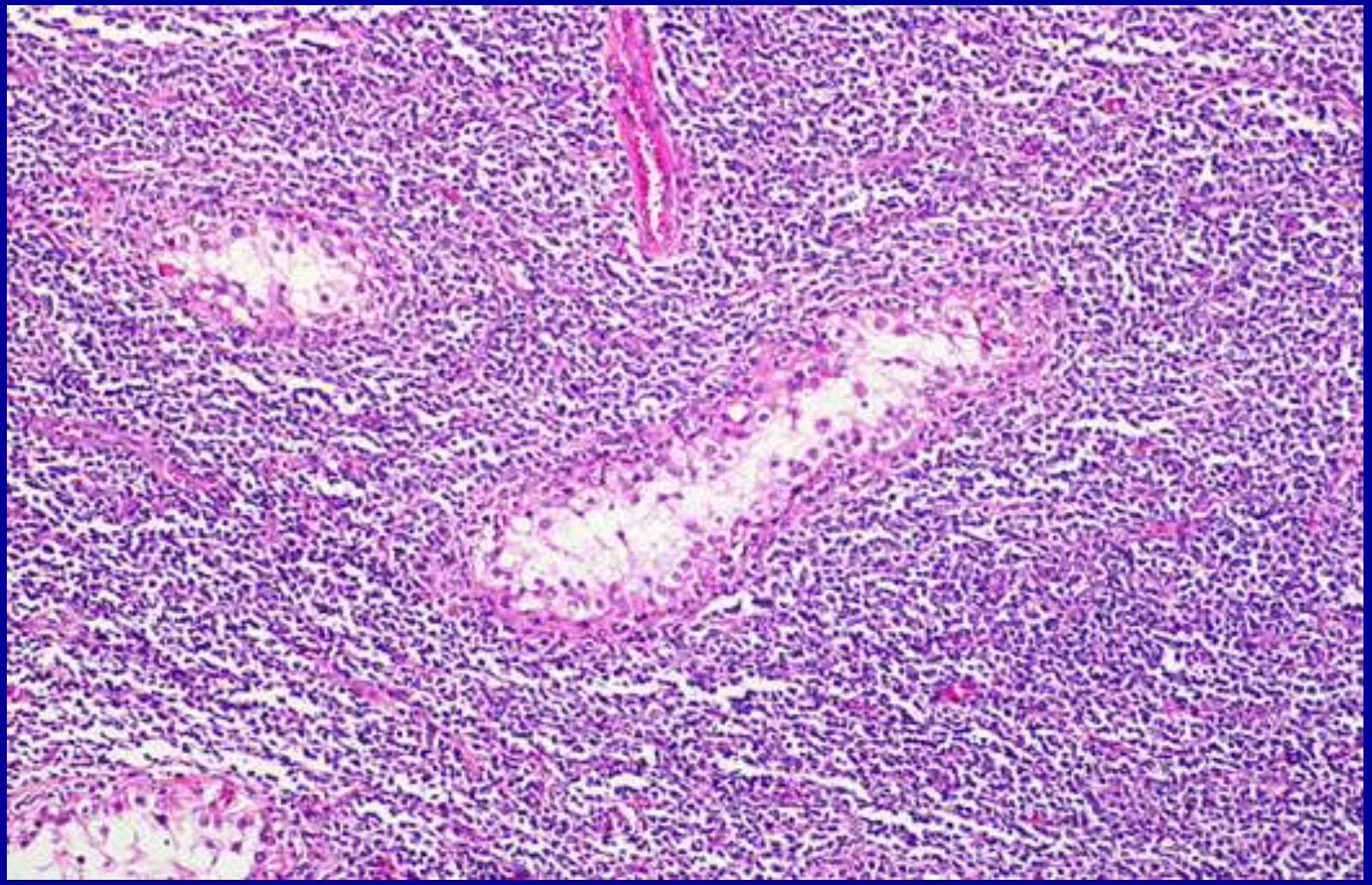
TUMORI TESTISA

GONADOBLASTOMA



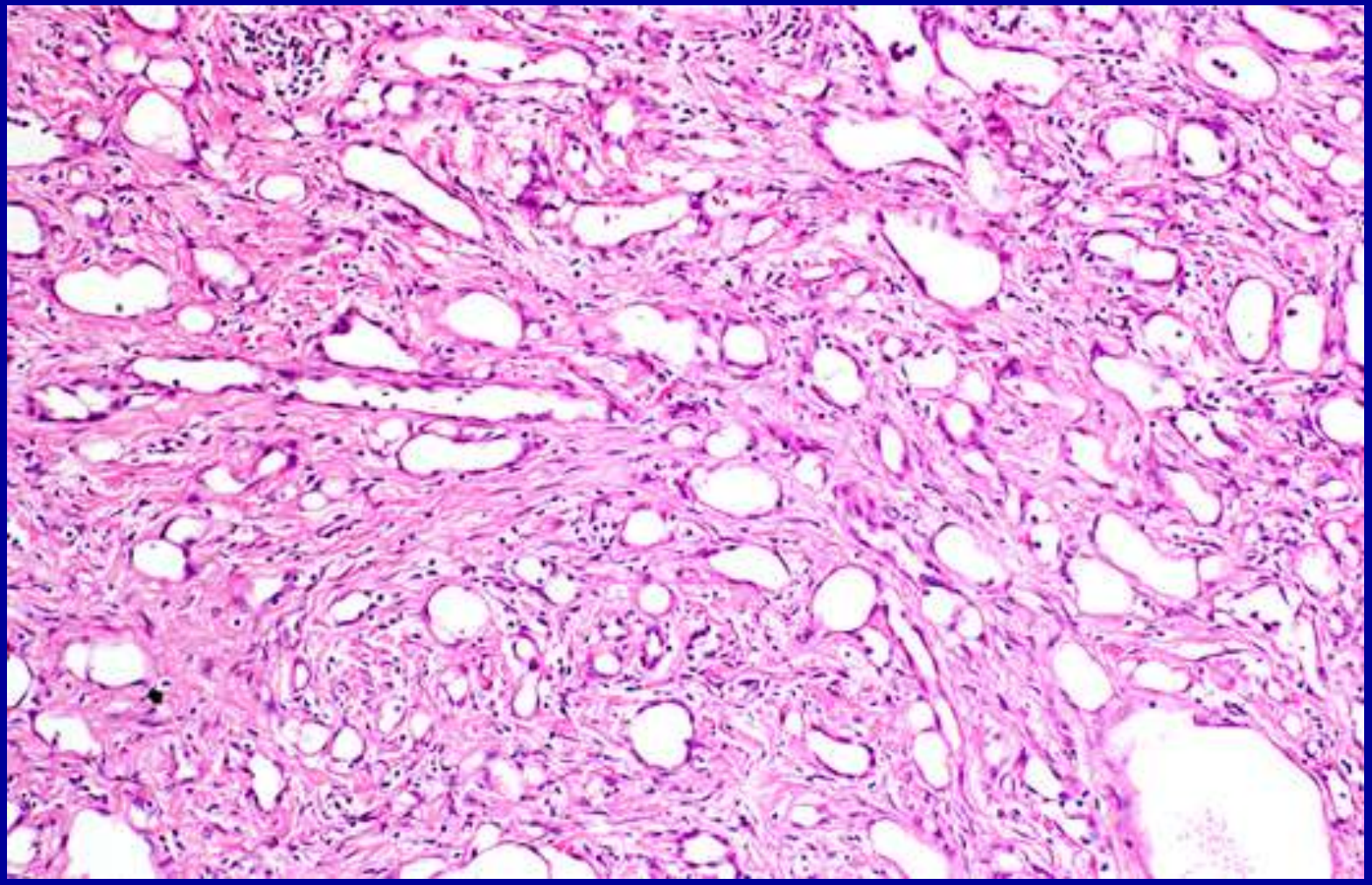
TUMORI TESTISA

LYMPHOID AND HEMATOPOIETIC TUMOURS



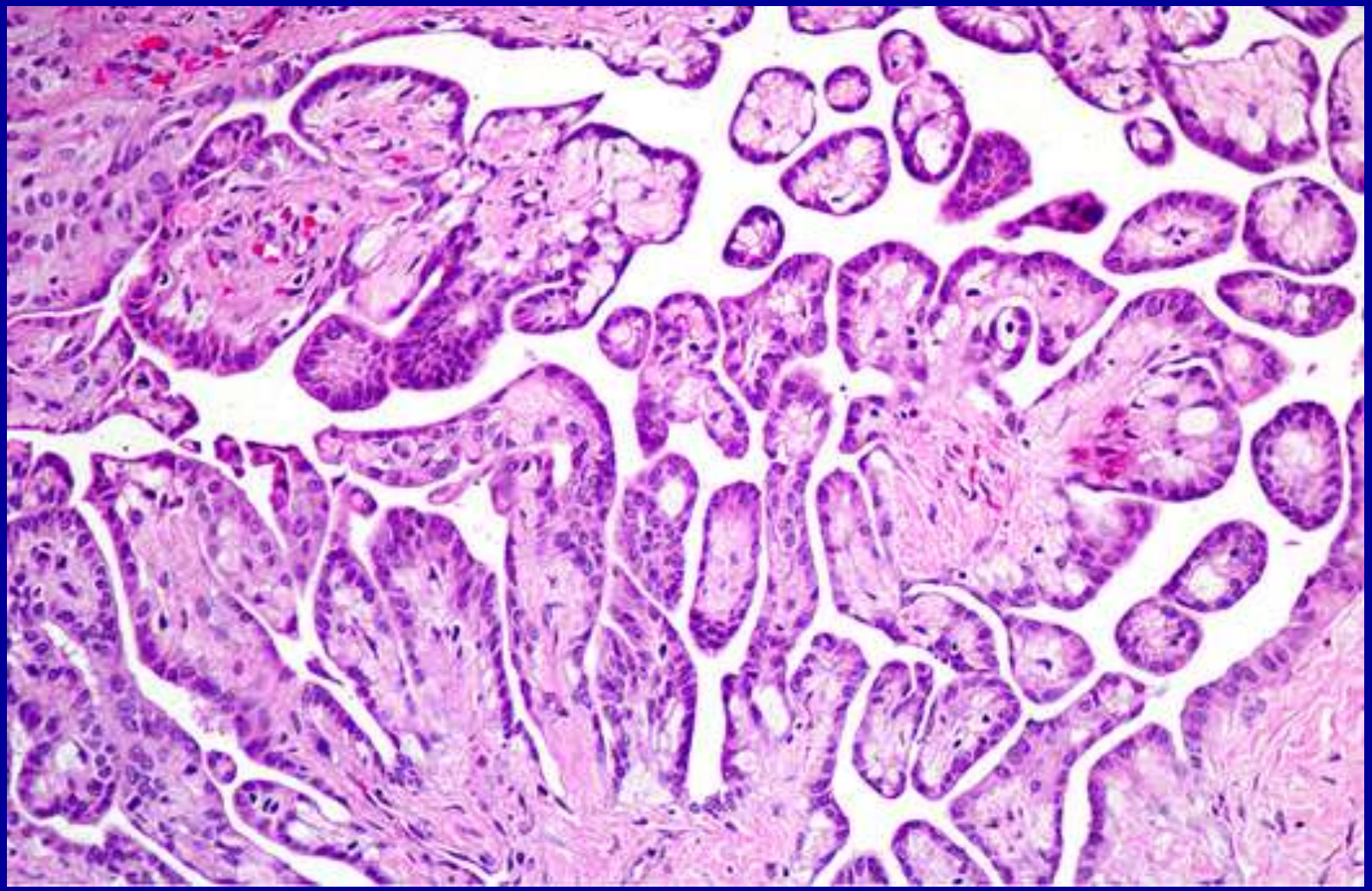
TUMORI TESTISA

ADENOMATOID TUMOR



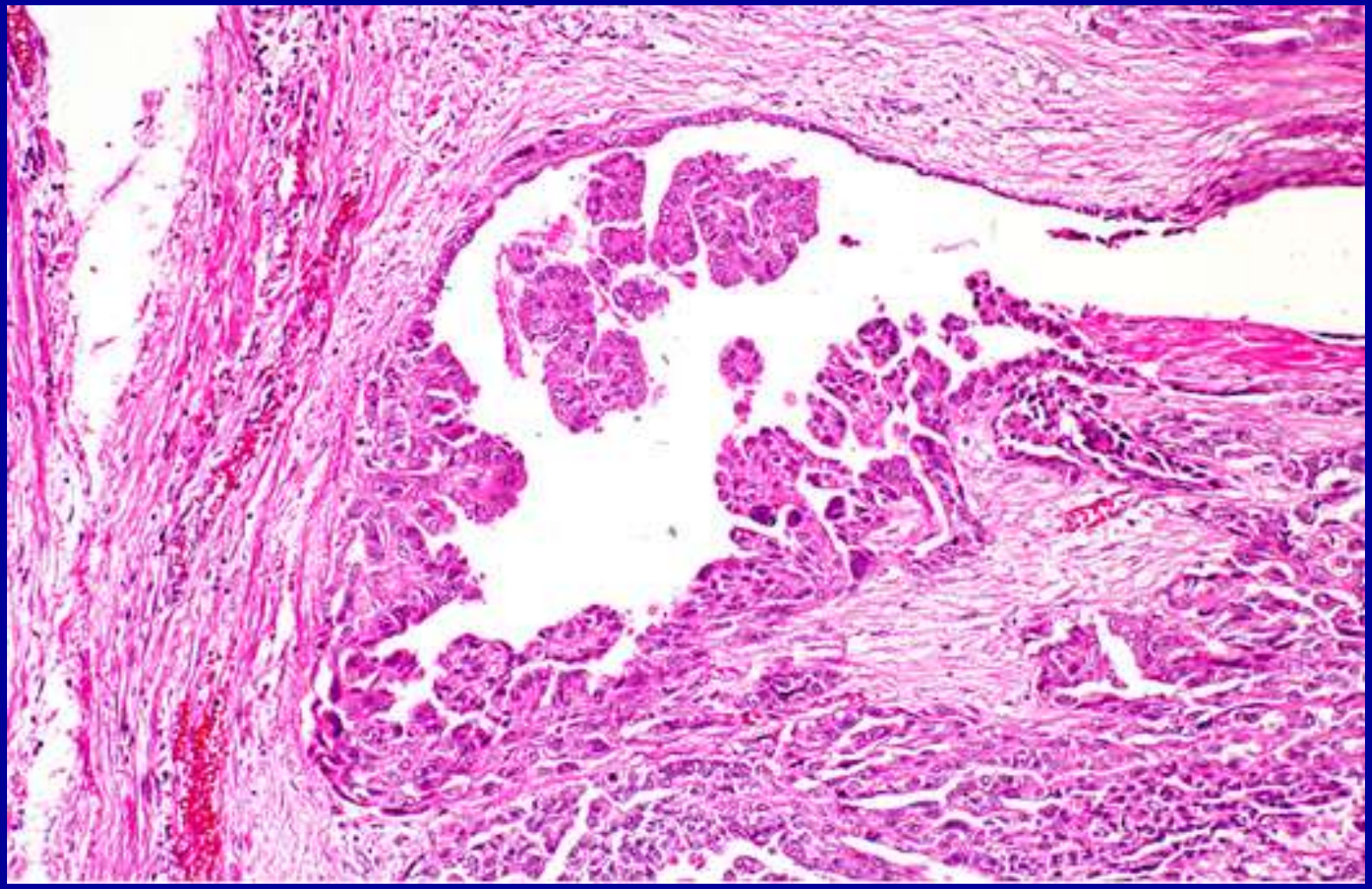
TUMORI TESTISA

MESOTHELIOMA



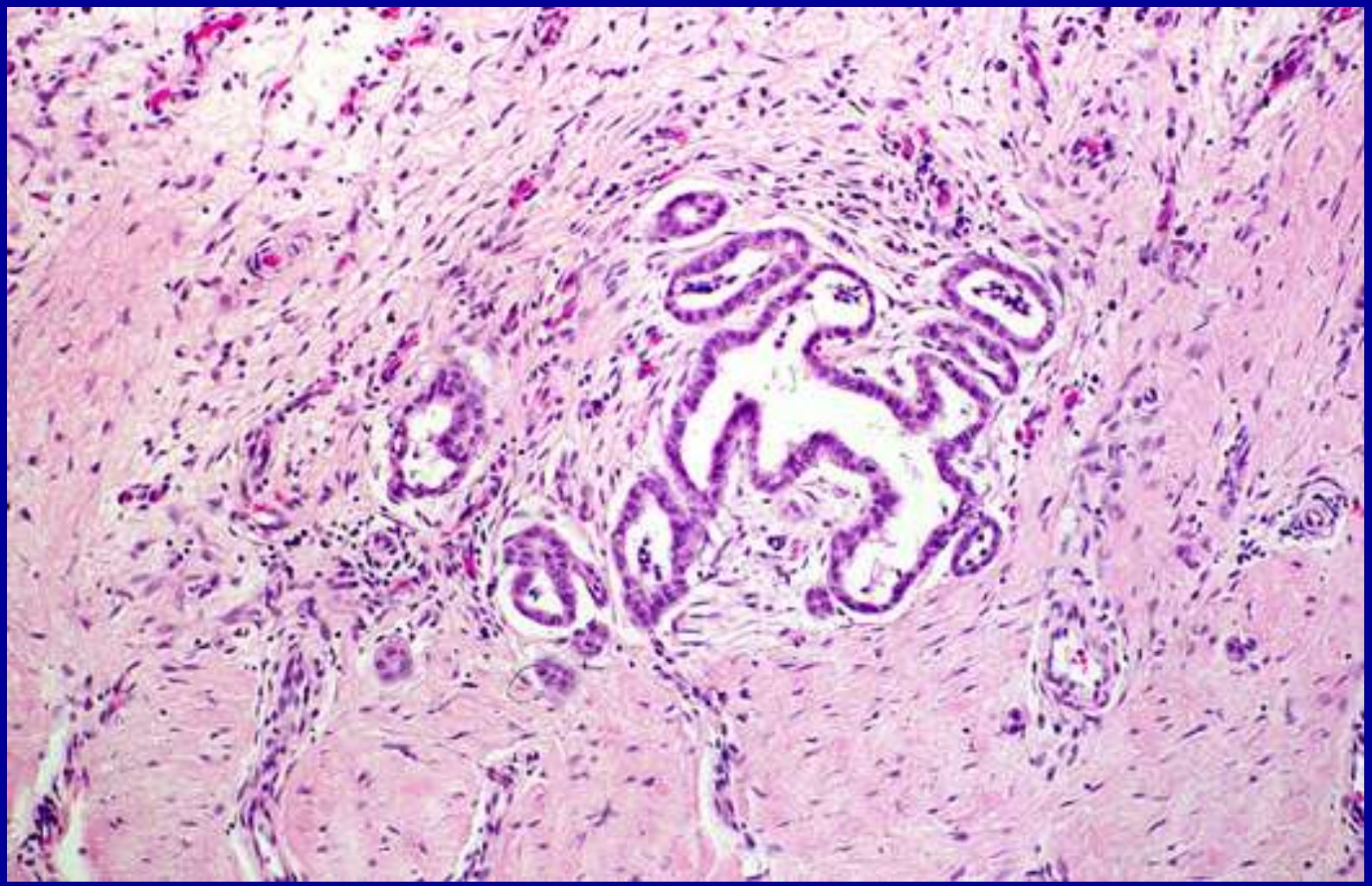
TUMORI TESTISA

MESOTHELIOMA



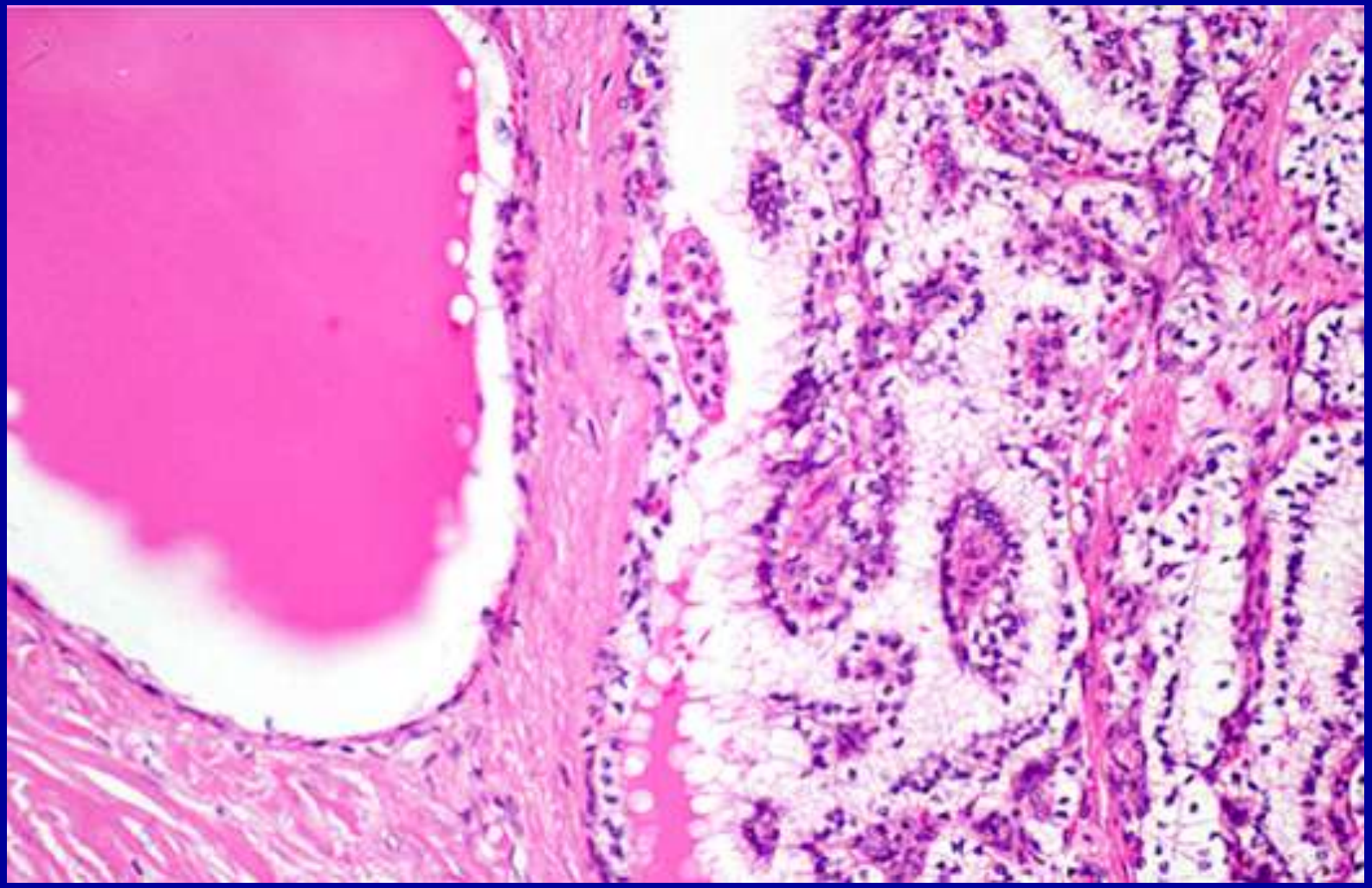
TUMORI TESTISA

MESOTHELIOMA



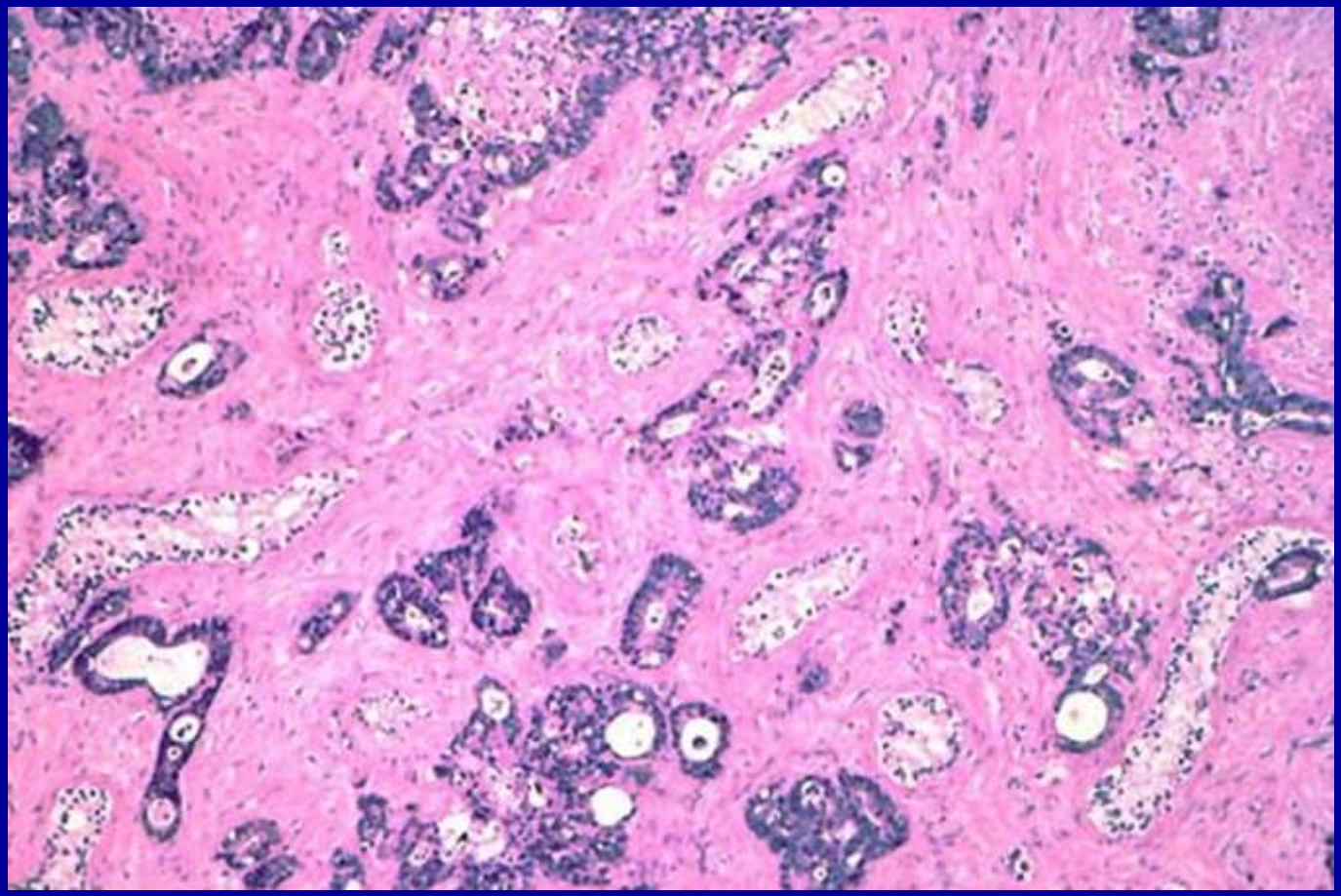
TUMORI TESTISA

ADENOMA



TUMORI TESTISA

CARCINOMA PROSTATAE METASTATICUM TESTIS



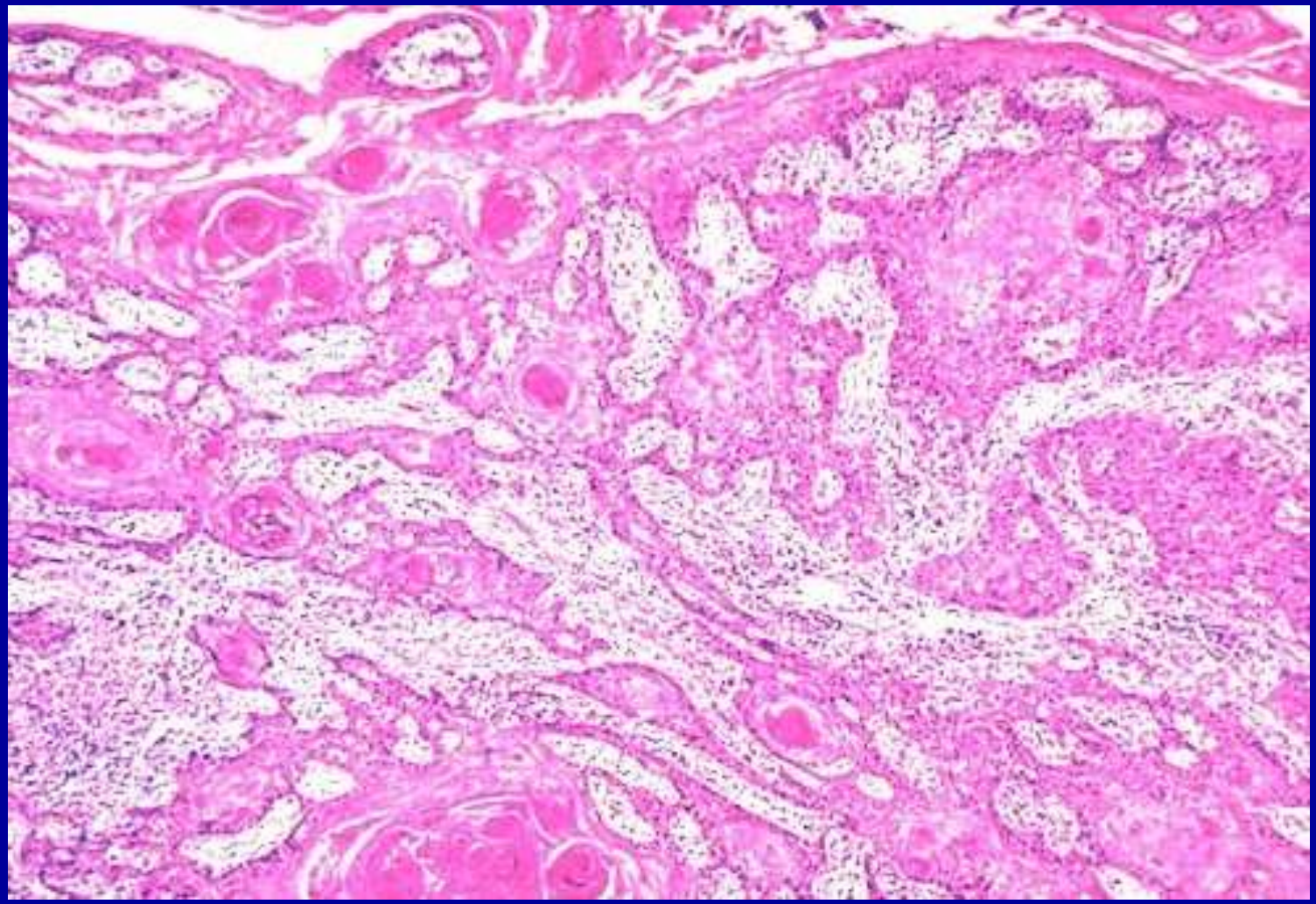
PATOLOGIJA PENISA I SKROTUMA

PENIS

- KONGENITALNE ANOMALIJE
- INFLAMACIJA
- VASKULARNE ABNORMALNOSTI
- EPITELIJALNE NEOPLAZME

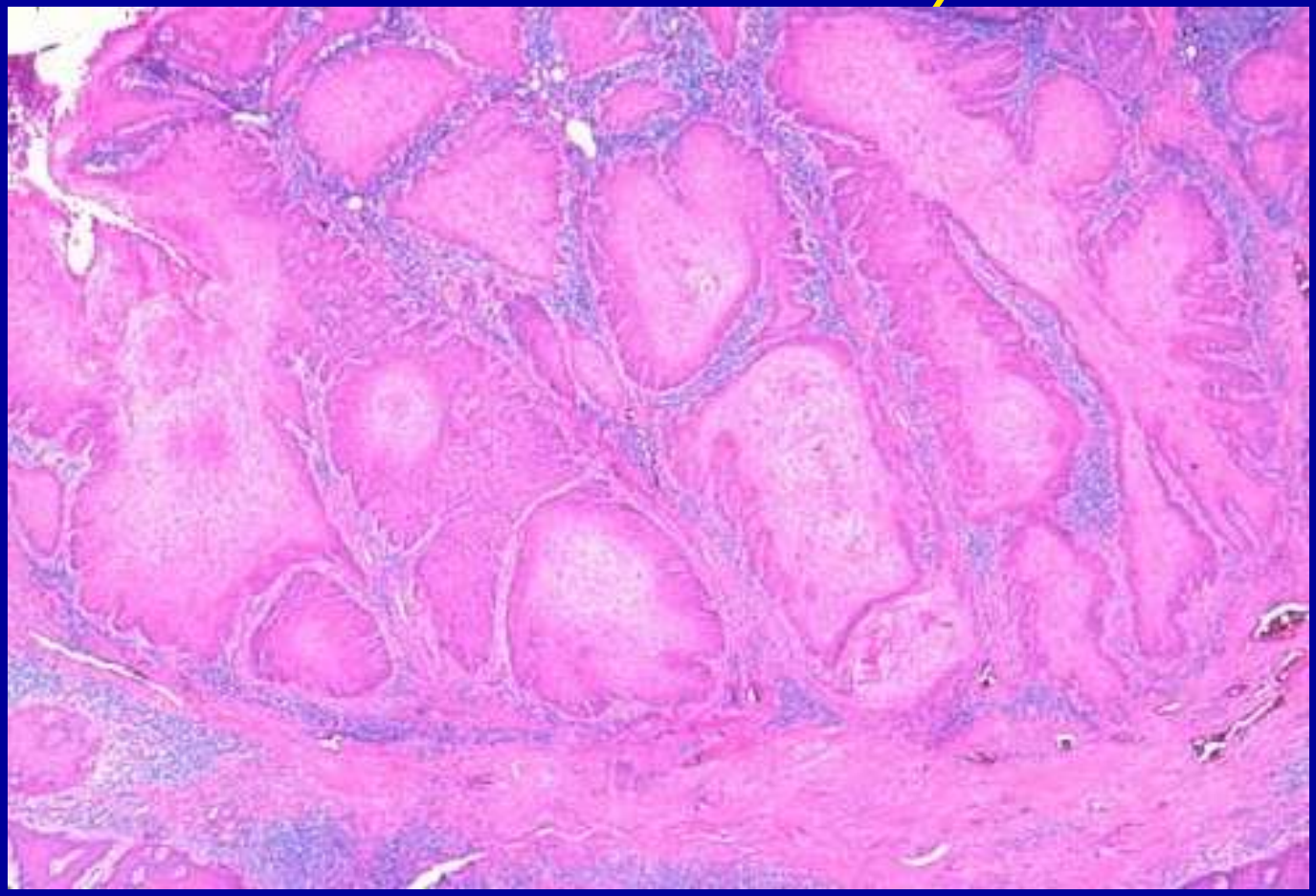
PATOLOGIJA PENISA I SKROTUMA

SKVAMOZNI KARCINOM



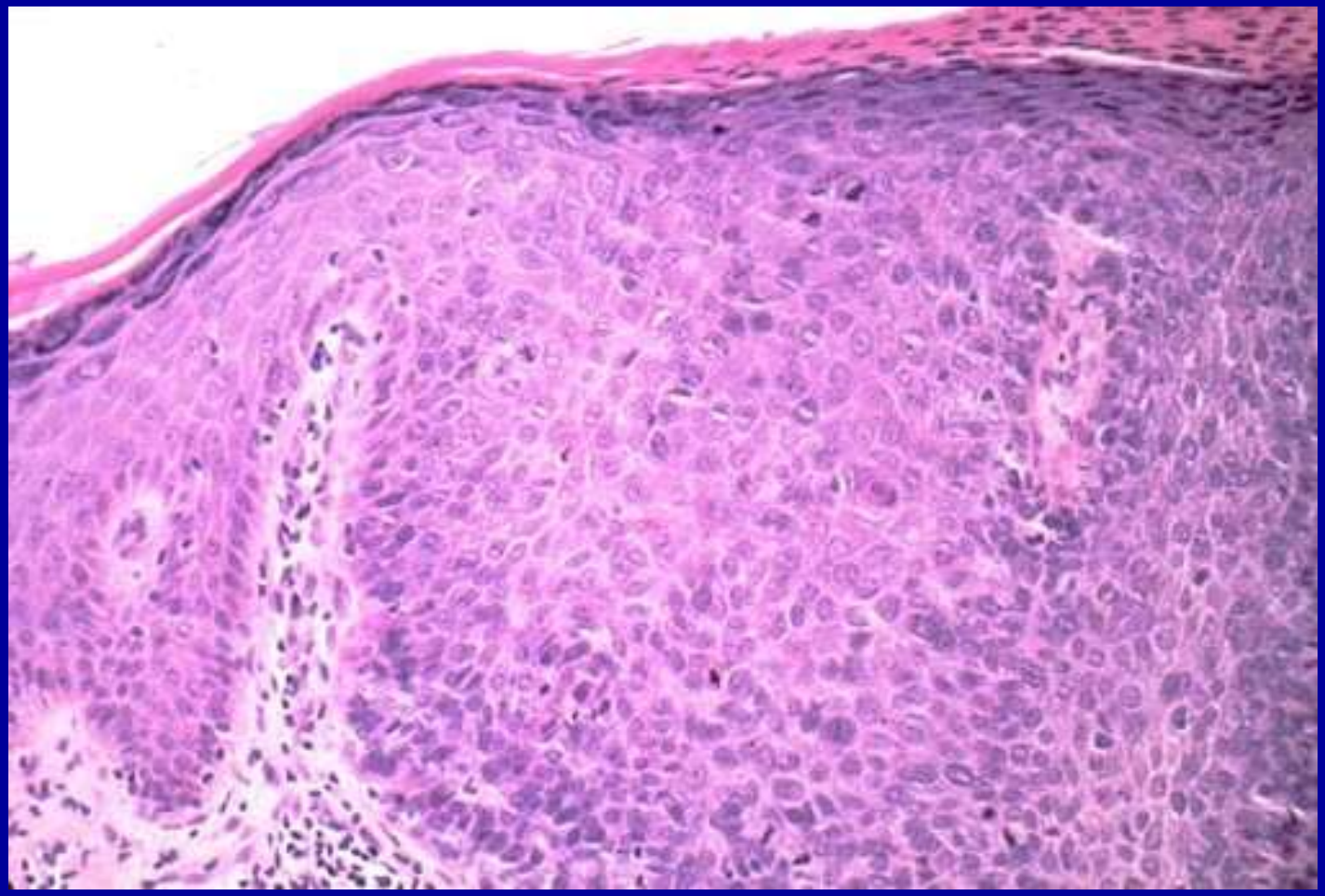
PATOLOGIJA PENISA I SKROTUMA

VARIJANTE-VERUKOZNI (GIANT-BUSCHKE-LOWENSTEIN)



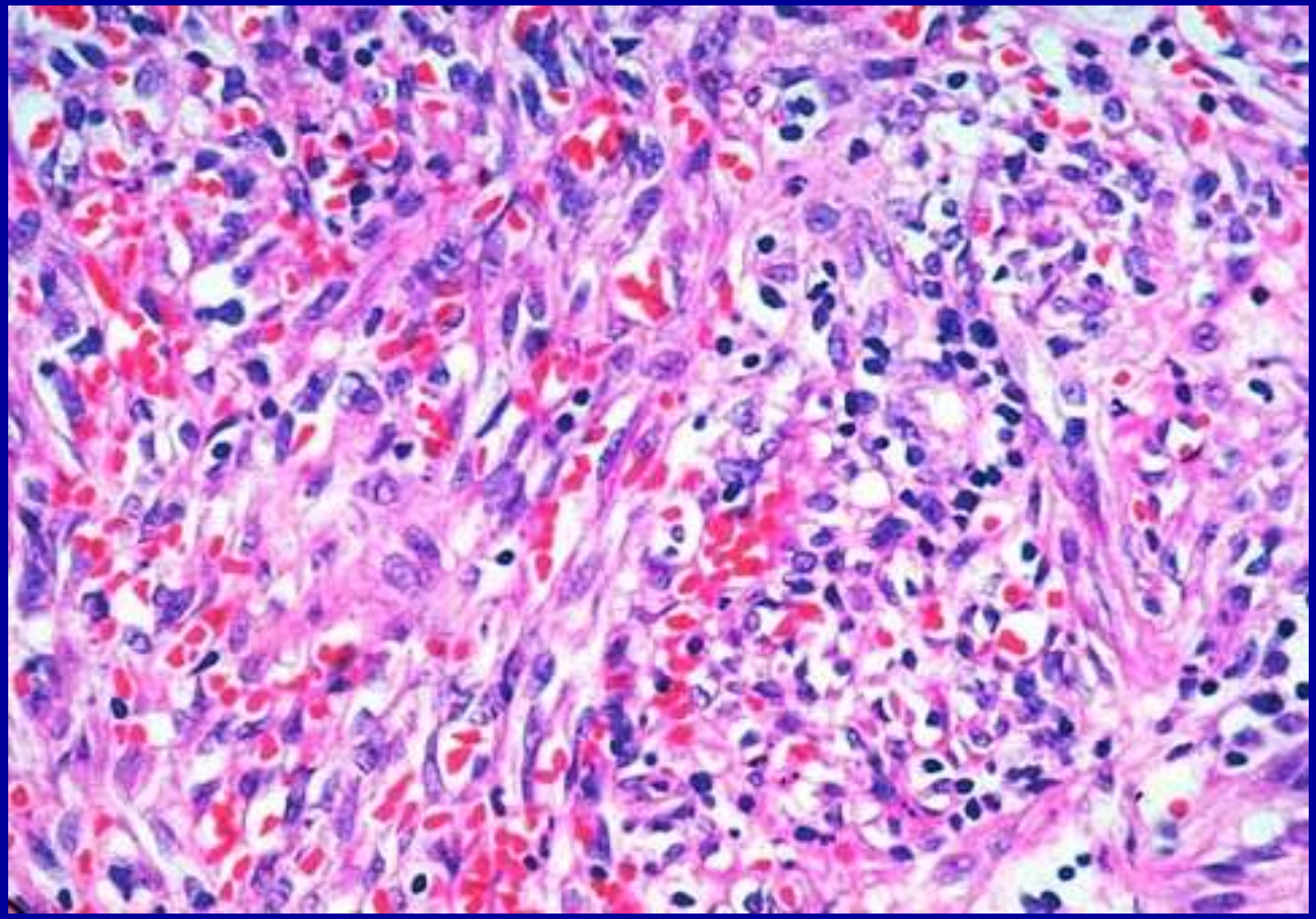
PATOLOGIJA PENISA I SKROTUMA

INTRTAEPITHELIAL NEOPLASM CIS- ERITROPLAZIJA QUEYRAT, BOWEN, BOWENOID PAPULOSIS



PATOLOGIJA PENISA I SKROTUMA

KAPOSI SARCOM



PATOLOGIJA PENISA I SKROTUMA

KARCINOMA

- SKVAMOZNI KARCINOM
- BASAL CELL CA
- PAGET DISEASE
- CARCINOMA IN SITU
- MELANOMA
- NEPITELIJALNE NEOPLAZME
- NENEOPLASTIČNA TUMORSKA STANJA

PATOLOGIJA PROSTATE I SEMENIH KESICA

PROSTATA

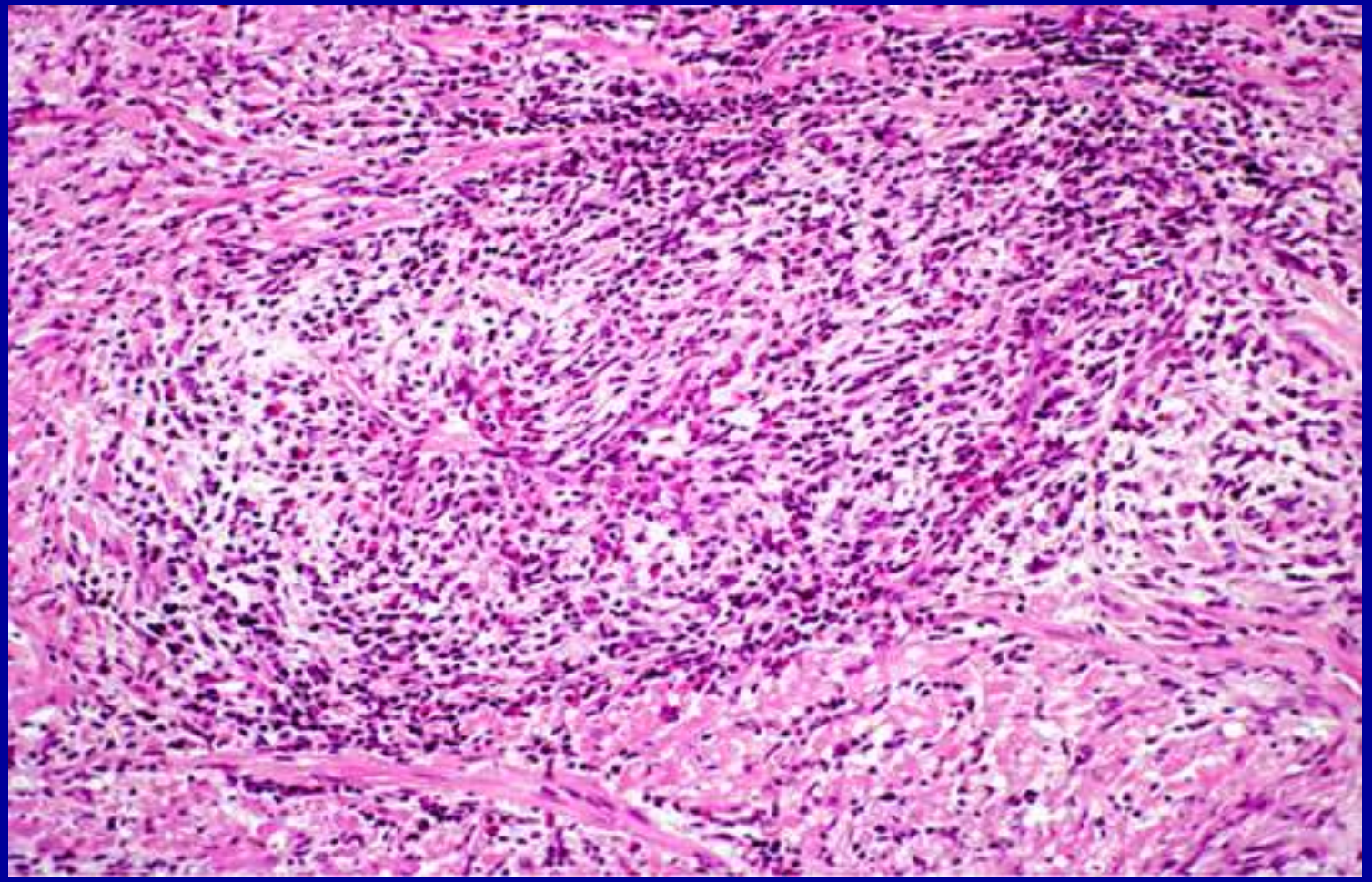
- KONGENITALNE ANOMALIJE
- INFLAMACIJA I INFEKCIJE
- METAPLAZIJA
- HIPERPLAZIJA
- NENEOPLASTICNE PROMENE
- NEOPLAZME

PATOLOGIJA PROSTATE I SEMENIH KESICA

- HIPERPLAZIJA PROSTATE
- PREMALIGENE PROMENE-
- ADENOCARCINOMA PROSTATAE
- DRUGI TUMORI PROSTATE

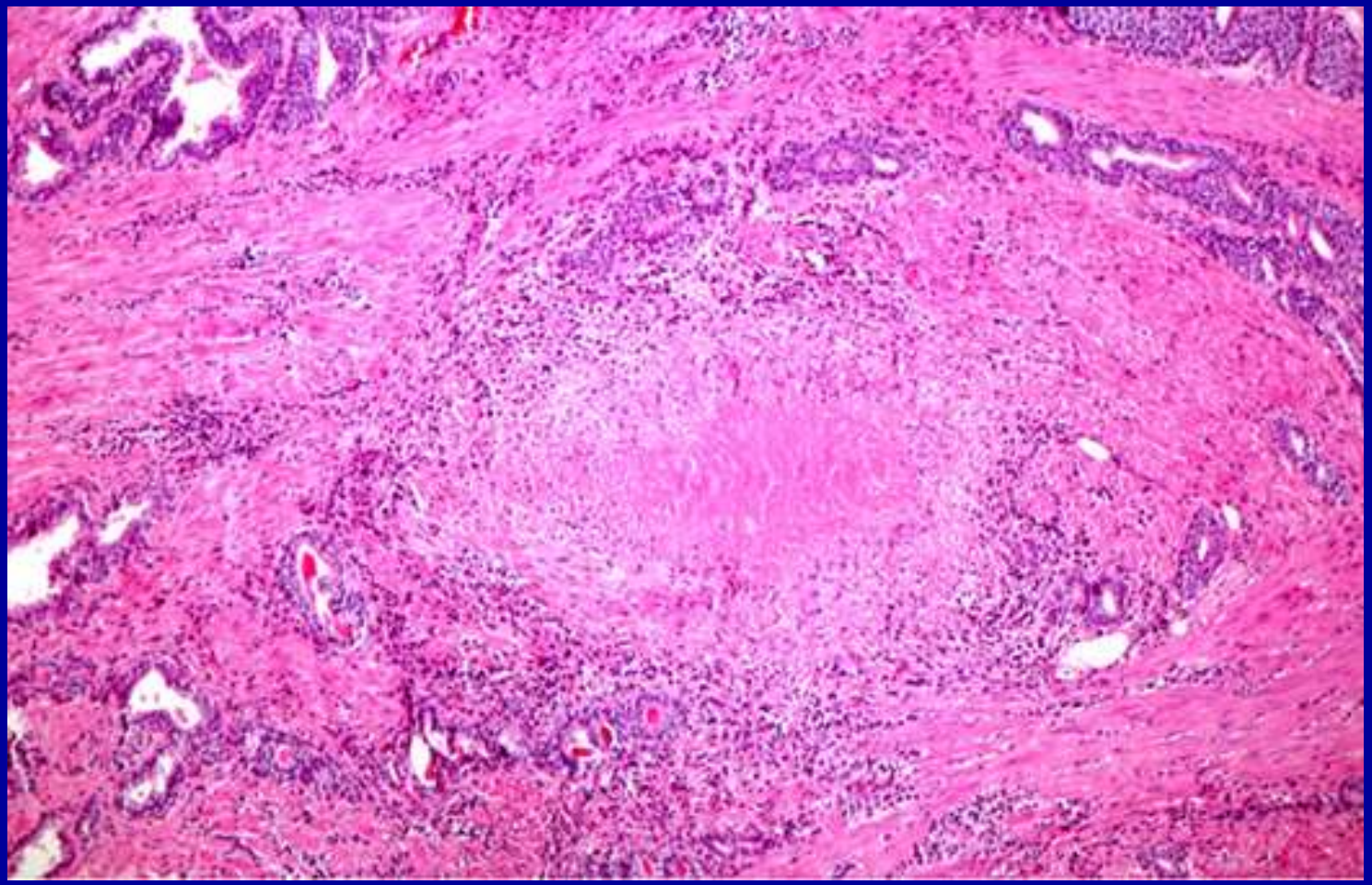
PATOLOGIJA PROSTATE I SEMENIH KESICA

GRANULOMATOUS PROSTATITIS



PATOLOGIJA PROSTATE I SEMENIH KESICA

GRANULOMATOUS PROSTATITIS



TNM CLASSIFICATION OF CARCINOMAS OF THE PROSTATE

T Primary tumour

- TX Primary tumour cannot be assessed
- T0 No evidence of primary tumour
- T1 Clinically inapparent tumour not palpable or visible by imaging
- T1a Tumour incidental histological finding in 5% or less of tissue resected
- T1b Tumour incidental histological finding in more than 5% of tissue resected

TNM CLASSIFICATION OF CARCINOMAS OF THE PROSTATE

T Primary tumour

- T1c Tumour identified by needle biopsy (e.g., because of elevated PSA)
- T2 Tumour confined within prostate
- T2a Tumour involves one half of one lobe or less
- T2b Tumour involves more than half of one lobe, but not both lobes
- T2c Tumour involves both lobes

TNM CLASSIFICATION OF CARCINOMAS OF THE PROSTATE

T Primary tumour

- T3 Tumour extends beyond the prostate
- T3a Extracapsular extension (unilateral or bilateral)
- T3b Tumour invades seminal vesicle(s)
- T4 Tumour is fixed or invades adjacent structures other than seminal vesicles: bladder neck, external sphincter, rectum, levator muscles, or pelvic wall

WHO HISTOLOGICAL CLASSIFICATION OF PROSTATE TUMORS

N Regional lymph nodes

- NX Regional lymph nodes cannot be assessed
- N0 No regional lymph node metastasis
- N1 Regional lymph node metastasis

WHO HISTOLOGICAL CLASSIFICATION OF PROSTATE TUMORS

M Distant metastasis

- MX Distant metastasis cannot be assessed
- M0 No distant metastasis
- M1 Distant metastasis
- M1a Non-regional lymph nodes(s)
- M1b Bone(s)
- M1c Other (site(s)

WHO HISTOLOGICAL CLASSIFICATION OF PROSTATE TUMORS

G Histopathological grading

- GX Grade cannot be assessed
- G1 Well differentiated (Gleason 2-4)
- G2 Moderately differentiated (Gleason 5-6)
- G3-4 Poorly differentiated/undifferentiated (Gleason 7-10)

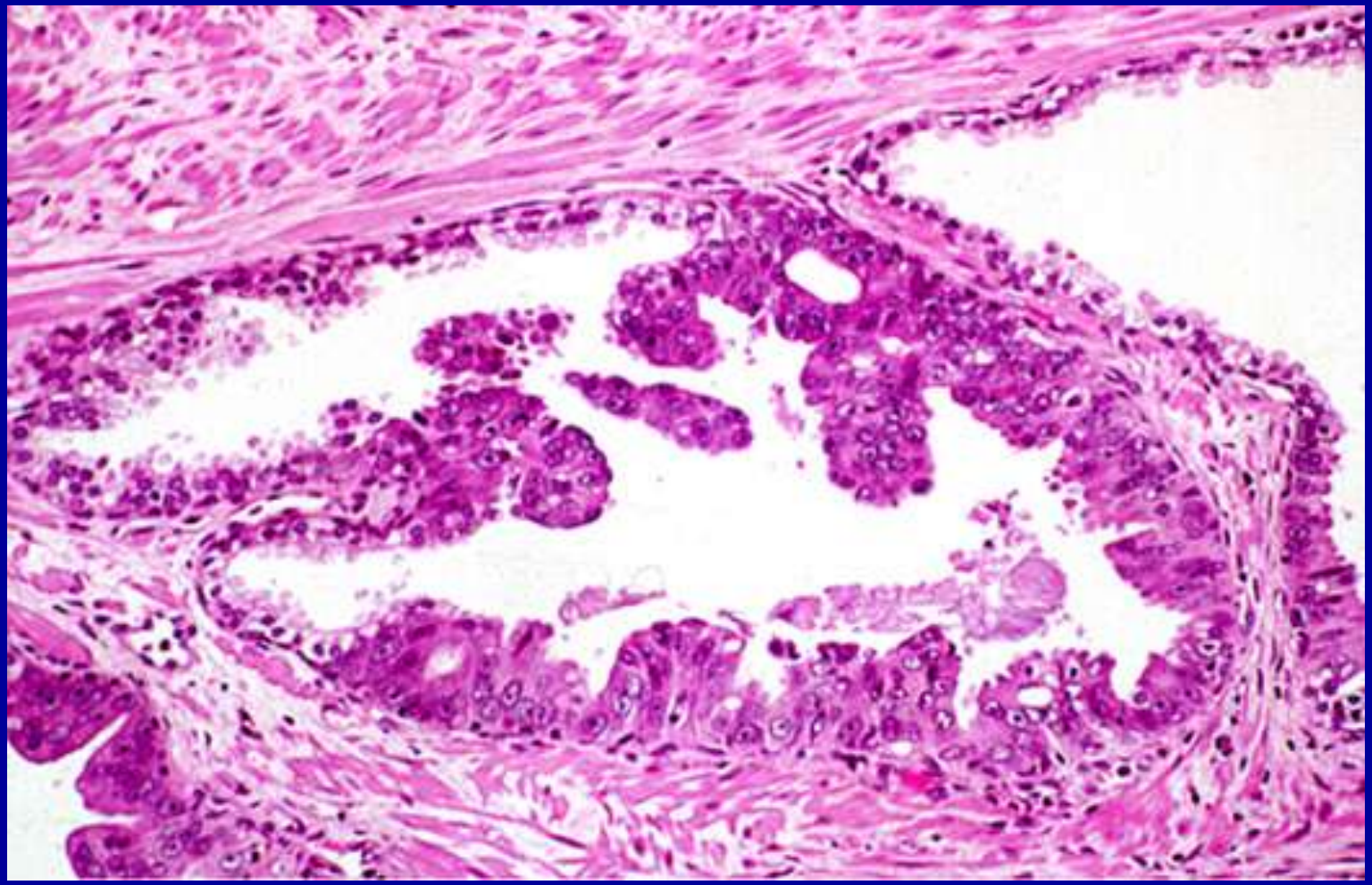
WHO HISTOLOGICAL CLASSIFICATION OF PROSTATE TUMORS

STAGE GROUPING

Stage I	T1a	N0	M0 G1
Stage II	T1a	N0	M0 G2, 3-4
	T1b, c	N0	M0 Any G
	T1,	T2	N0 M0 Any G
Stage III	T3	N0	M0 Any G
Stage IV	T4	N0	M0 Any G
	Any T	N2	M0 Any G
	Any T	Any N	M1 Any G

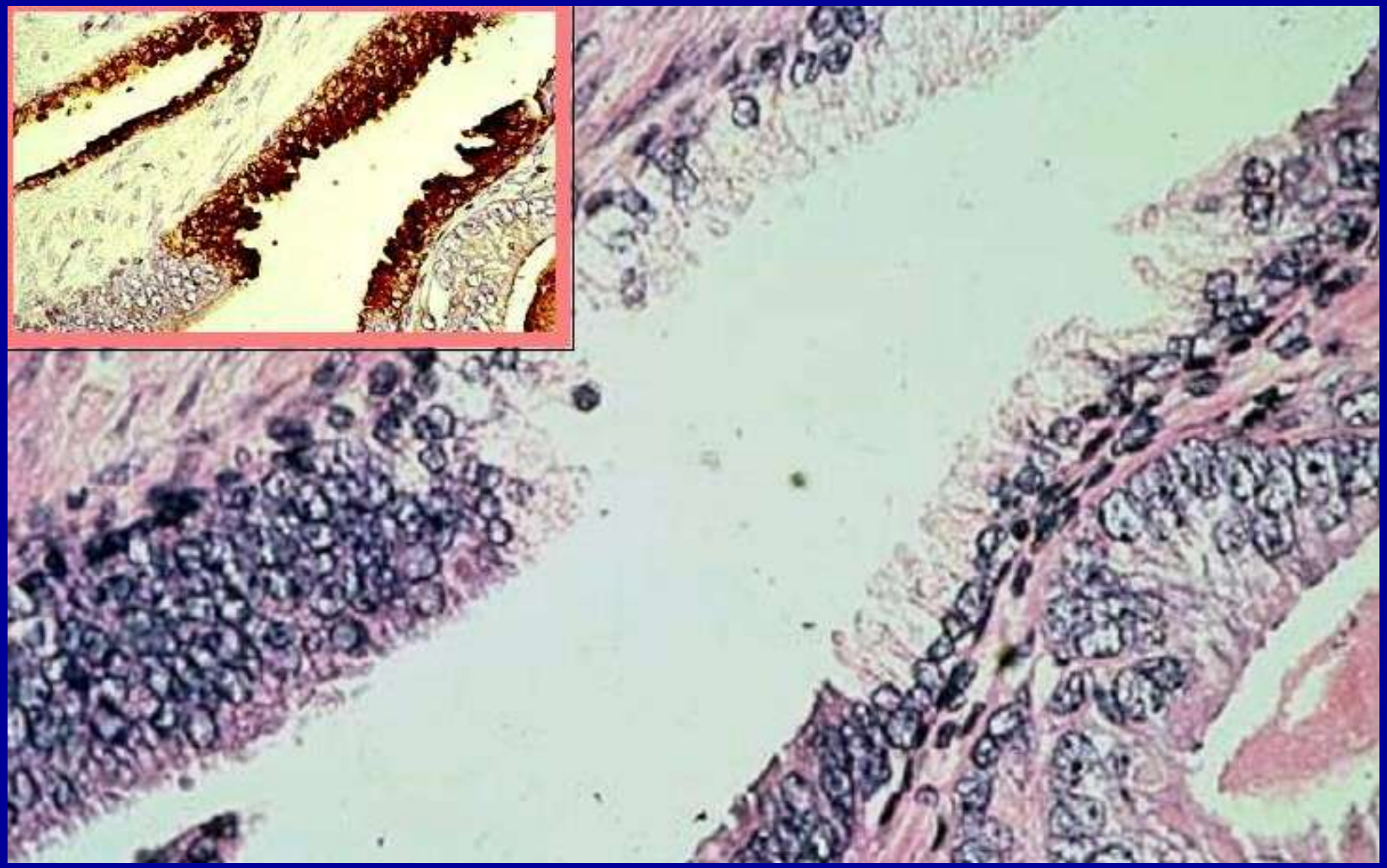
PREMALIGNE PROMENE

PREKURZORI-PROSTATICNA INTRAEPITELIJALNA NEOPLAZIJA



PREMALIGNE PROMENE

HG PIN-PSA IMMUNOSTAIN

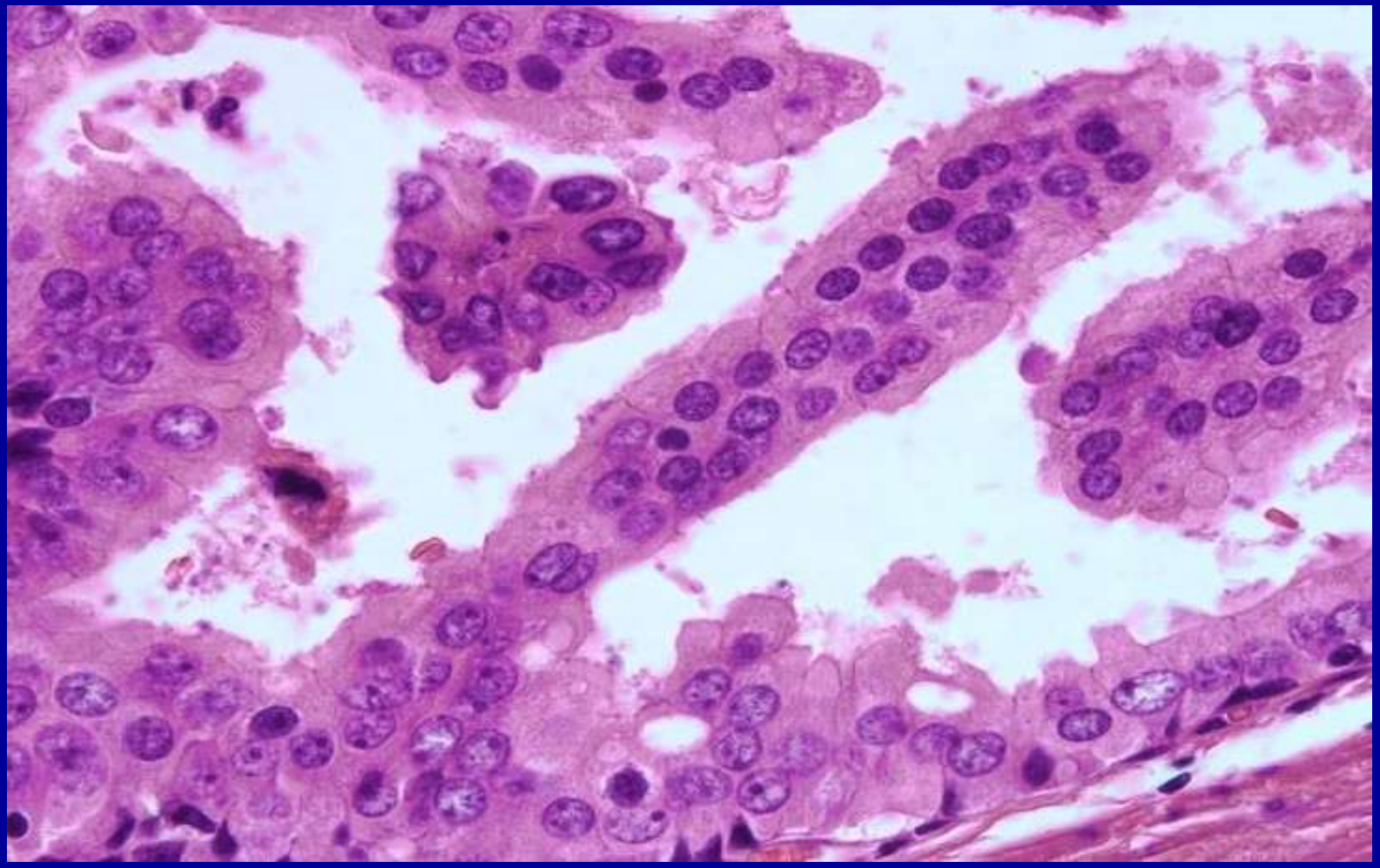


PREMALIGNE PROMENE

HG PIN-CK 34 BE 12

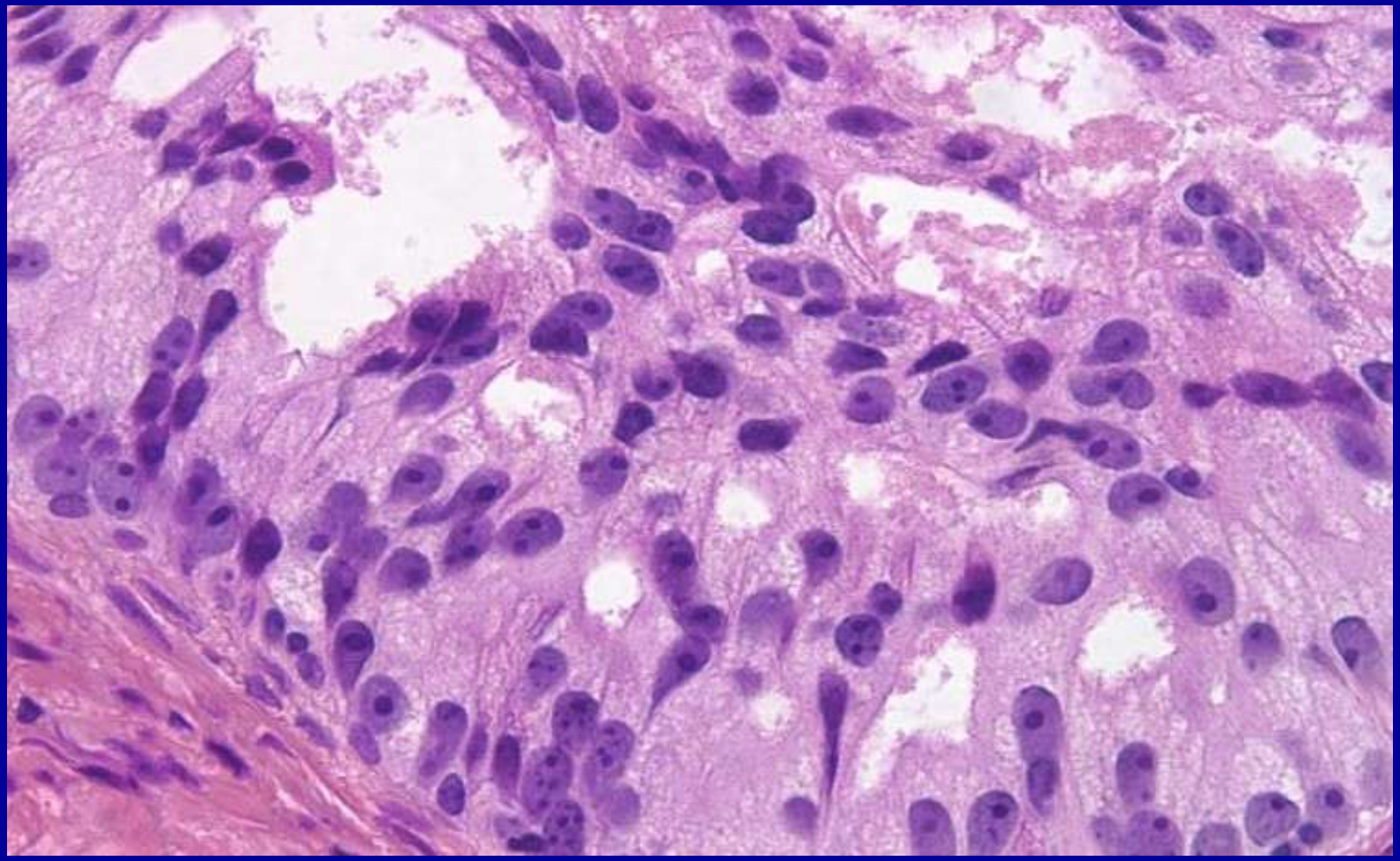
PREMALIGNE PROMENE

HG PIN



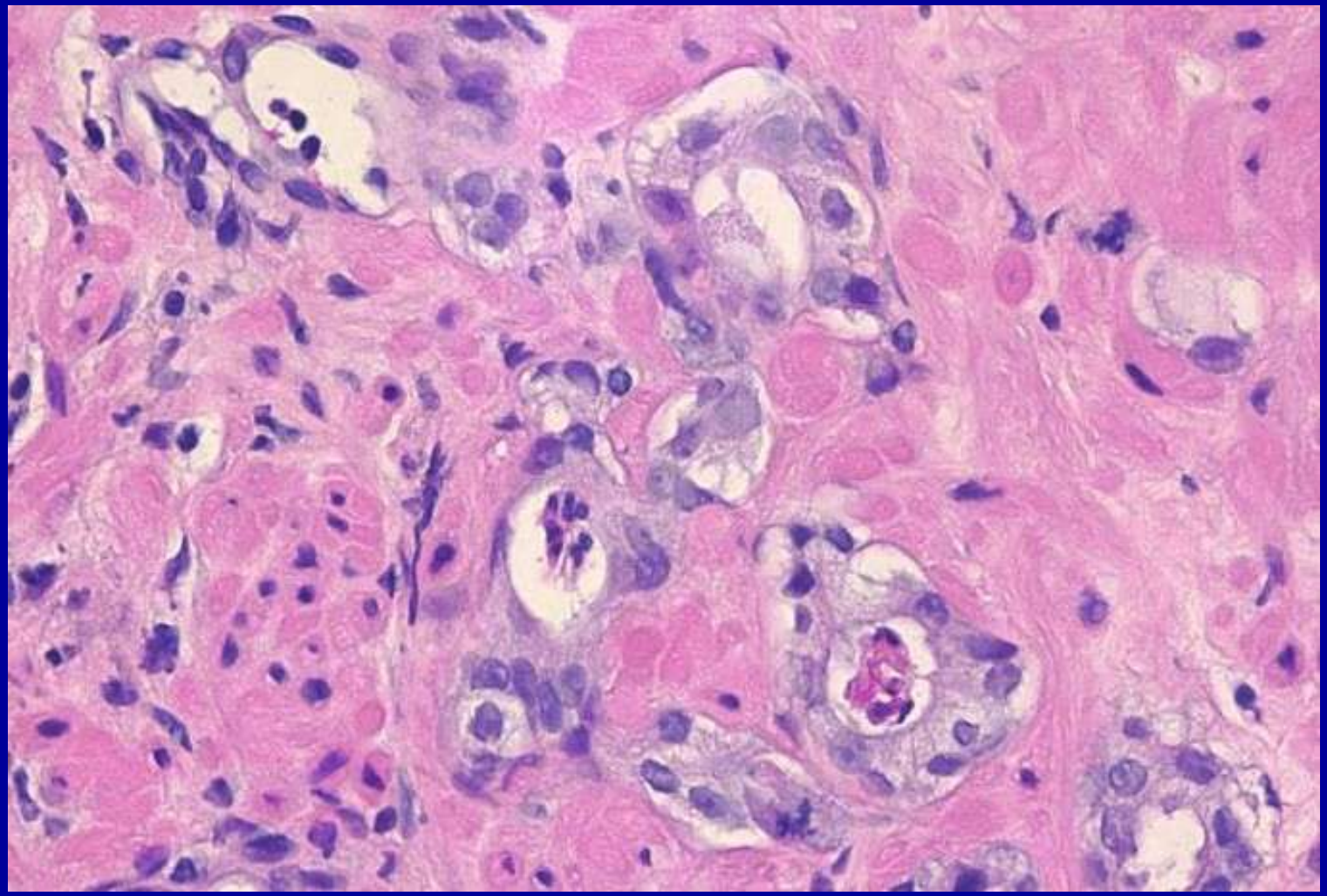
PREMALIGNE PROMENE

HG PIN



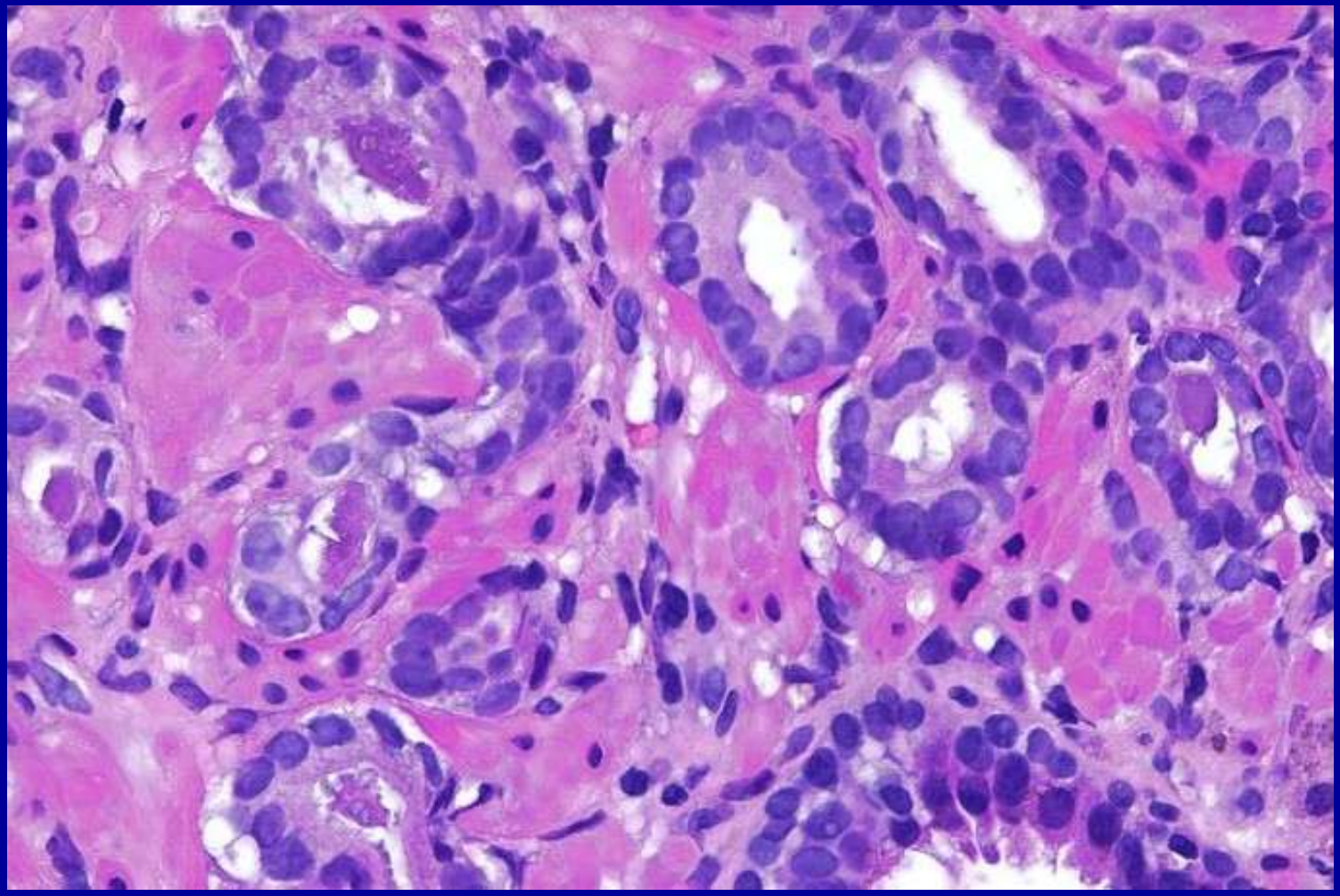
PREMALIGNE PROMENE

ASAP



PREMALIGNE PROMENE

ASAP



EPITELNI TUMORI

- MALIGNI
- KARCINOM PROSTATE
  - drugi vodeci uzrok smrti kod muskaraca obolelih od malignoma.
  - incidencija u stalnom porastu i dva puta veca od incidencije raka pluca.Cini oko 41% svih novootkrivenih malignoma muskaraca.Pik incidencije- 65-75g.

EPITELNI TUMORI

- KATEGORIJE KARCINOMA:
  - klinicki
  - okultni
  - incidentalni
  - latentni

EPITELNI TUMORI

- NASTANAK PC- karcinogeneza- kompleksan porces i obuhvata interakciju razlicitih faktora;genetskih, endogenih hormonskih promena, izlozenosti faktorima spoljasnje sredine i infektivnim agensima(seksualno transmisivne bolesti).

EPITELNI TUMORI

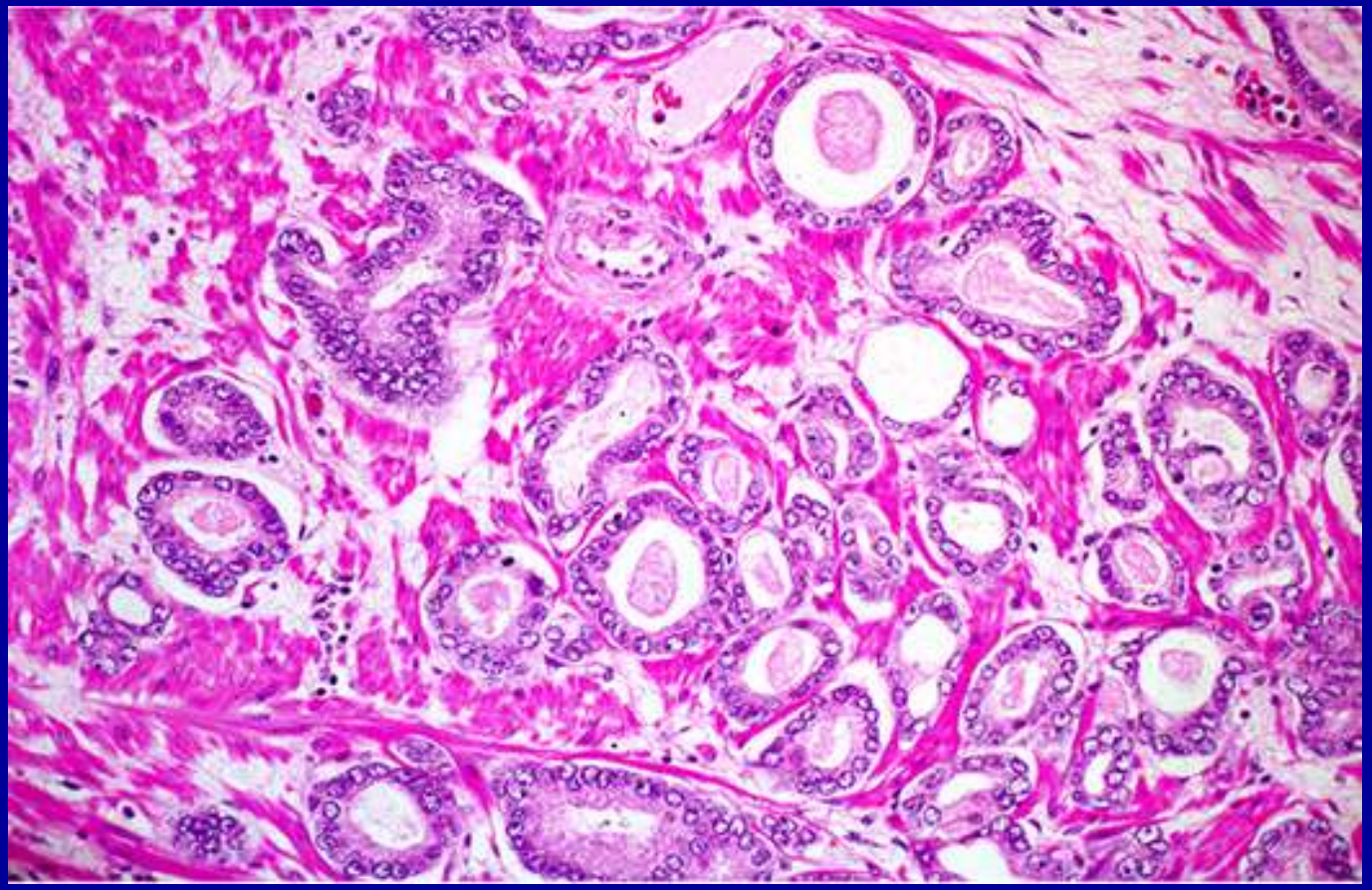
- PSA- DO 4ng/ml normalna
- 4, 1-10 ng/ml intermedijarna
- 10, 1 i vise izrazeno visoke
- indeks f/t PSA vazna- koreliraju sa volumenom.klinickim i patoloskim stadjumom bolesti. ispod 0, 10 je validan

EPITELNI TUMORI

- GLEASON sistem od 1966, dopunjen 1978, GLEASON i Melinger. odredjuje se
  – primarni- izgled kancerskih zljezda koje zauzimaju najvece podrucje uzorka
  - sekundarni- sledece najvecce polje kanceera
  - tecijarni- makar jedan fokus najvece anaplazije.

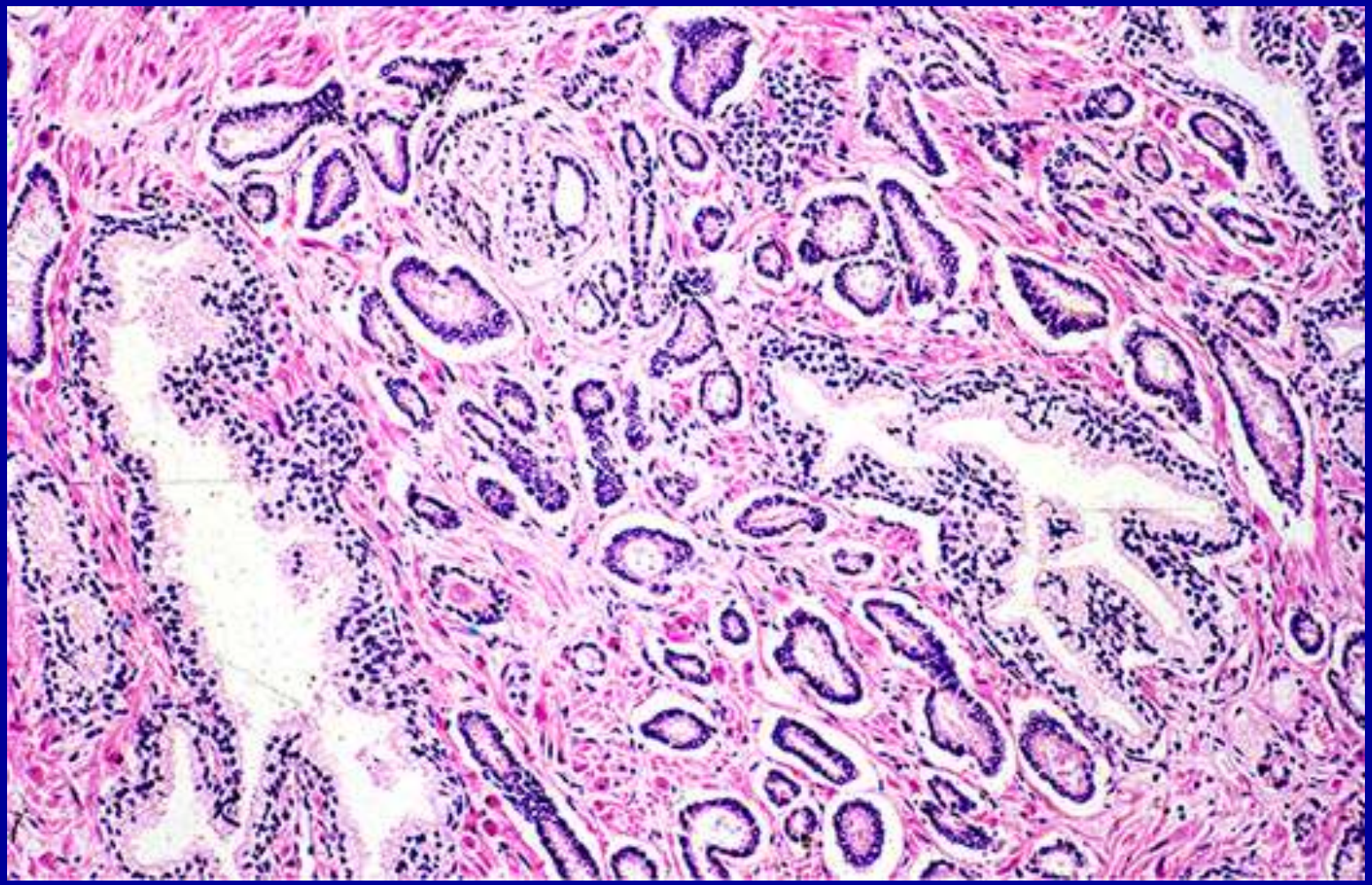
EPITELNI TUMORI

POJEDINE, ODVOJENE, UNIFORMNE, GUSTO ZBIJENE, NEJASNO OGRANICENE



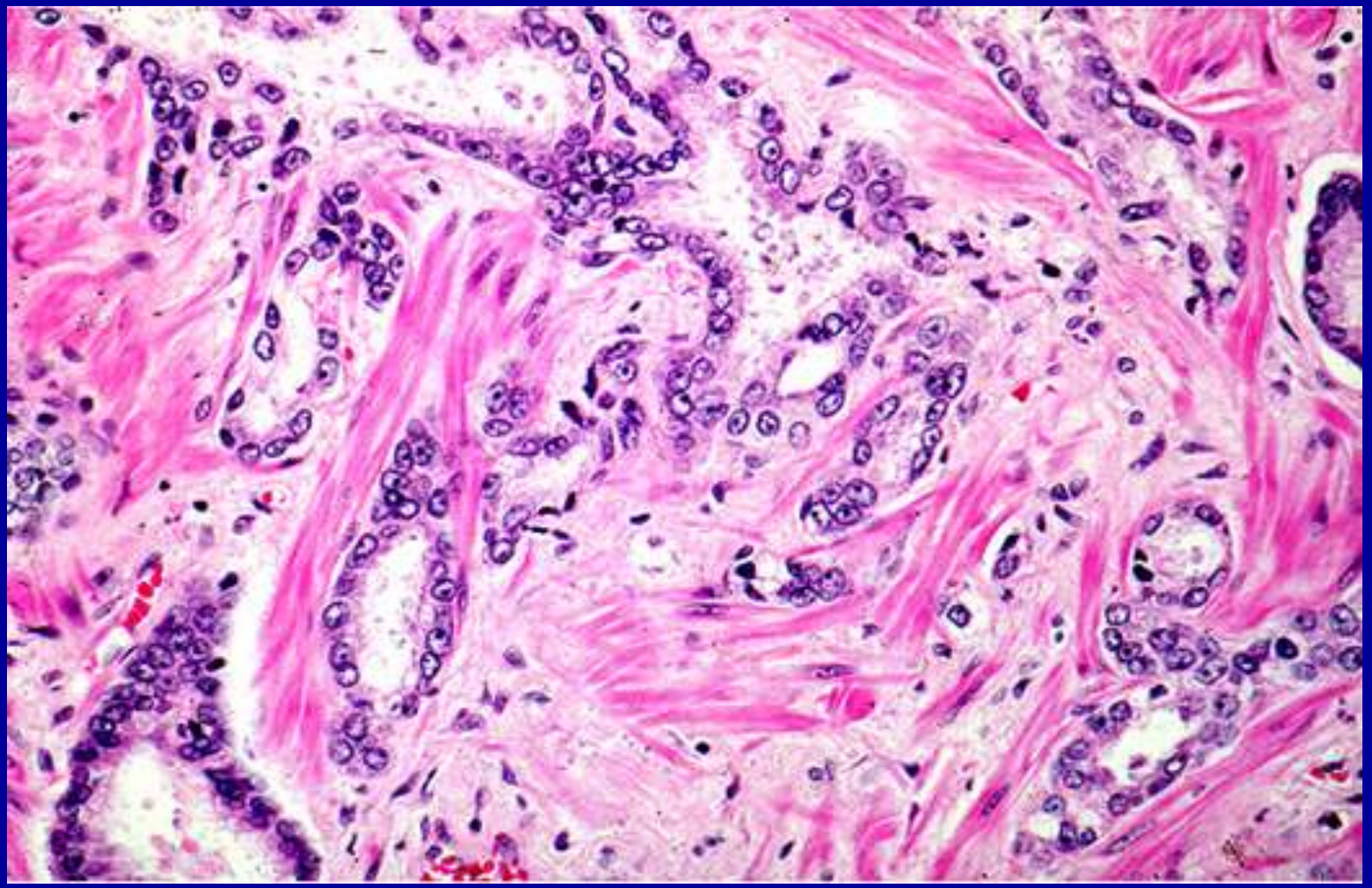
EPITELNI TUMORI

3A-POJEDINE ODVOJENE, UNIFORMNE OSKUDNE



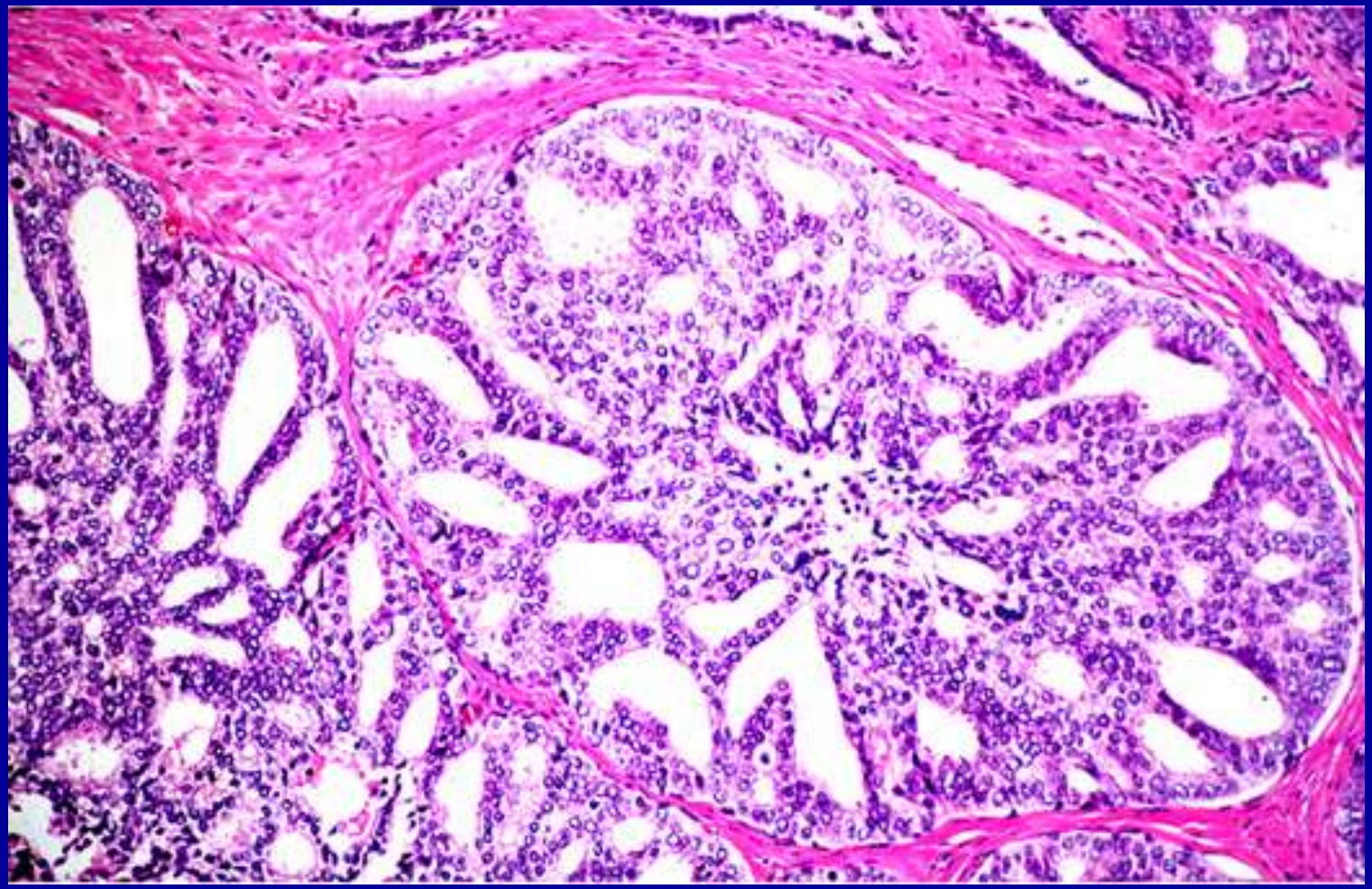
EPITELNI TUMORI

3B-POJEDINACNE, ODVOJENE, VRLO MALE, OSKUDNE



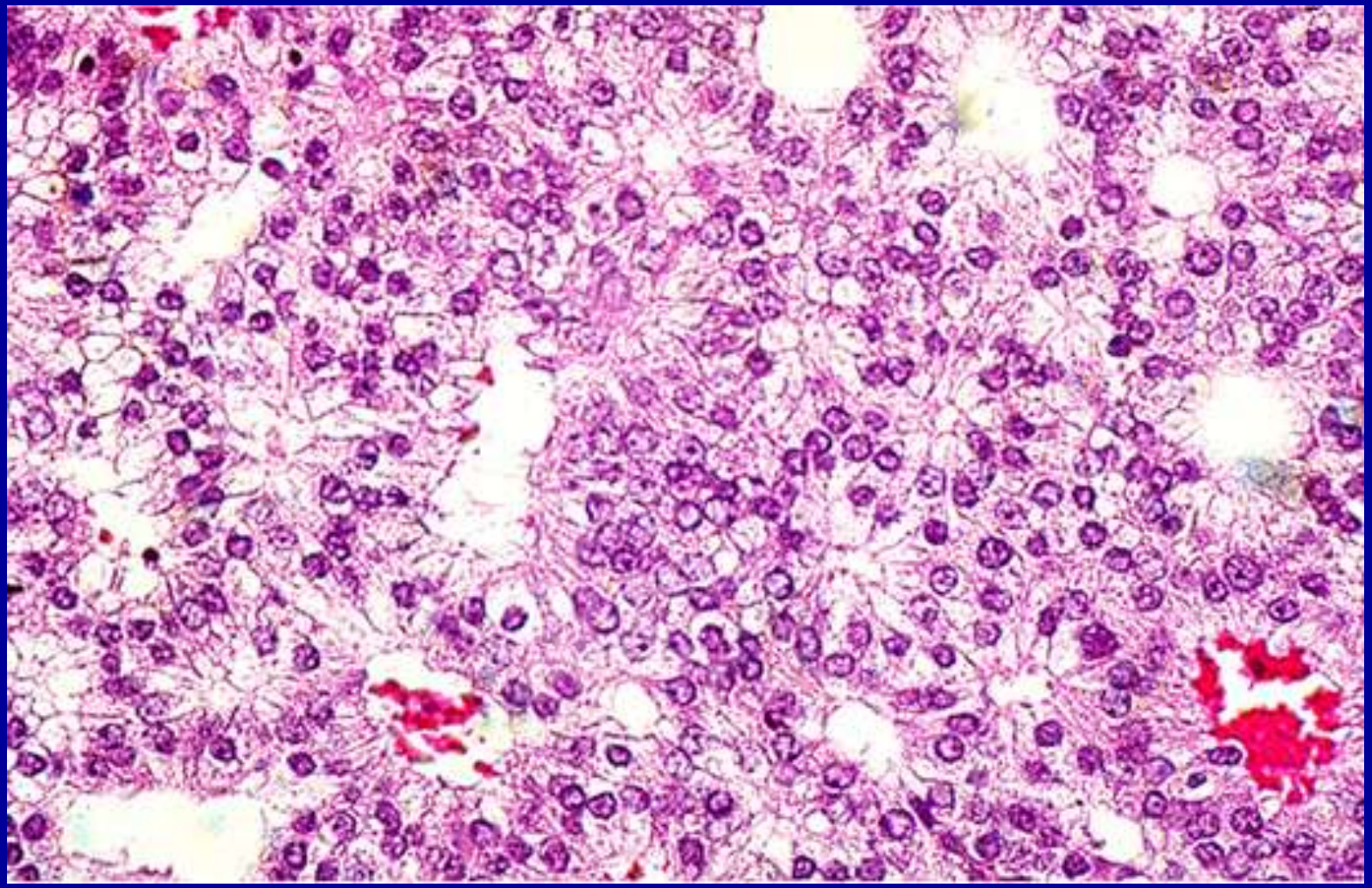
EPITELNI TUMORI

3C-PAPILARNE-KRIBRIFORMNE



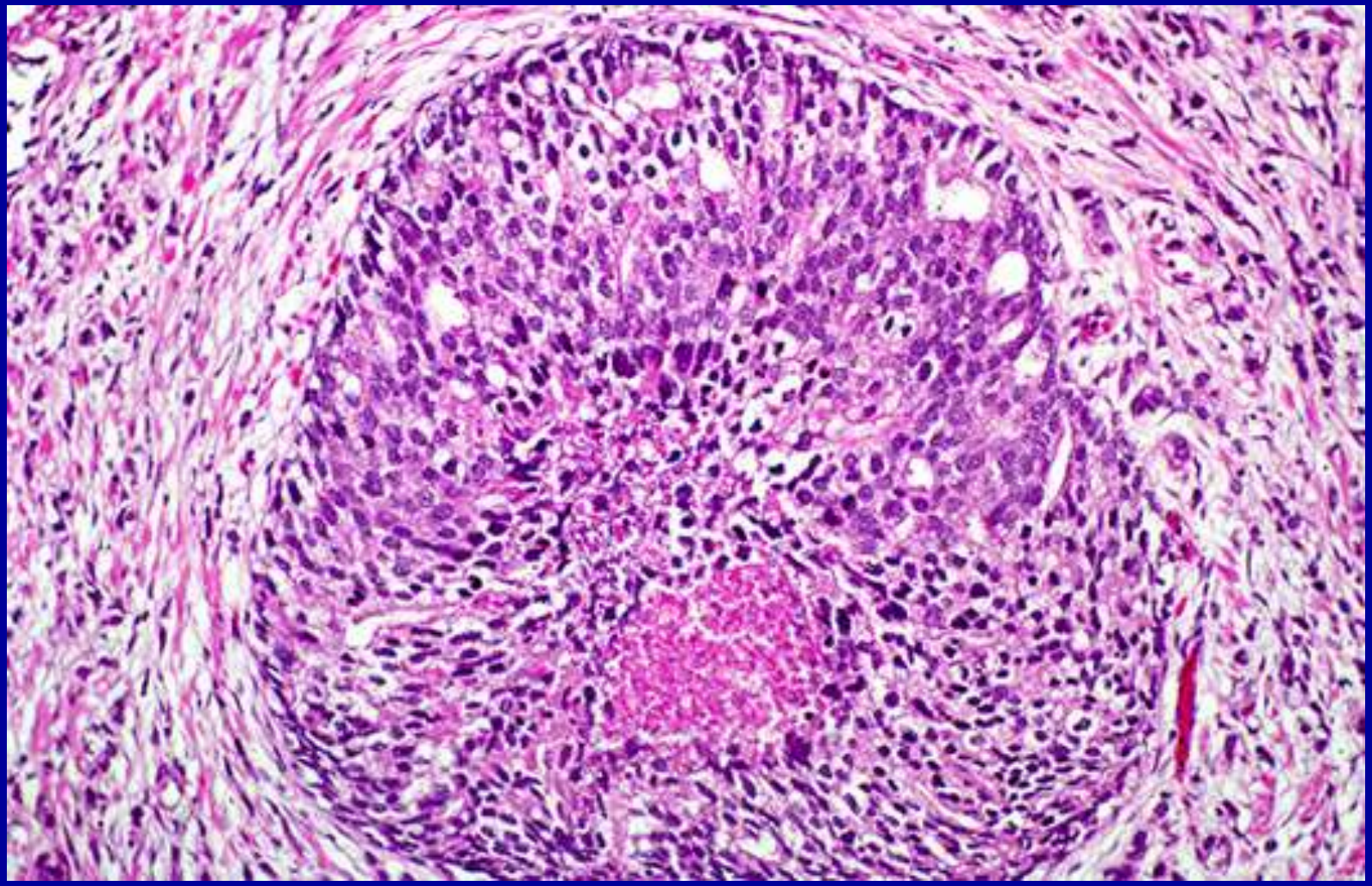
EPITELNI TUMORI

4A- fused-spojene zljezde, infiltrativnog izgleda



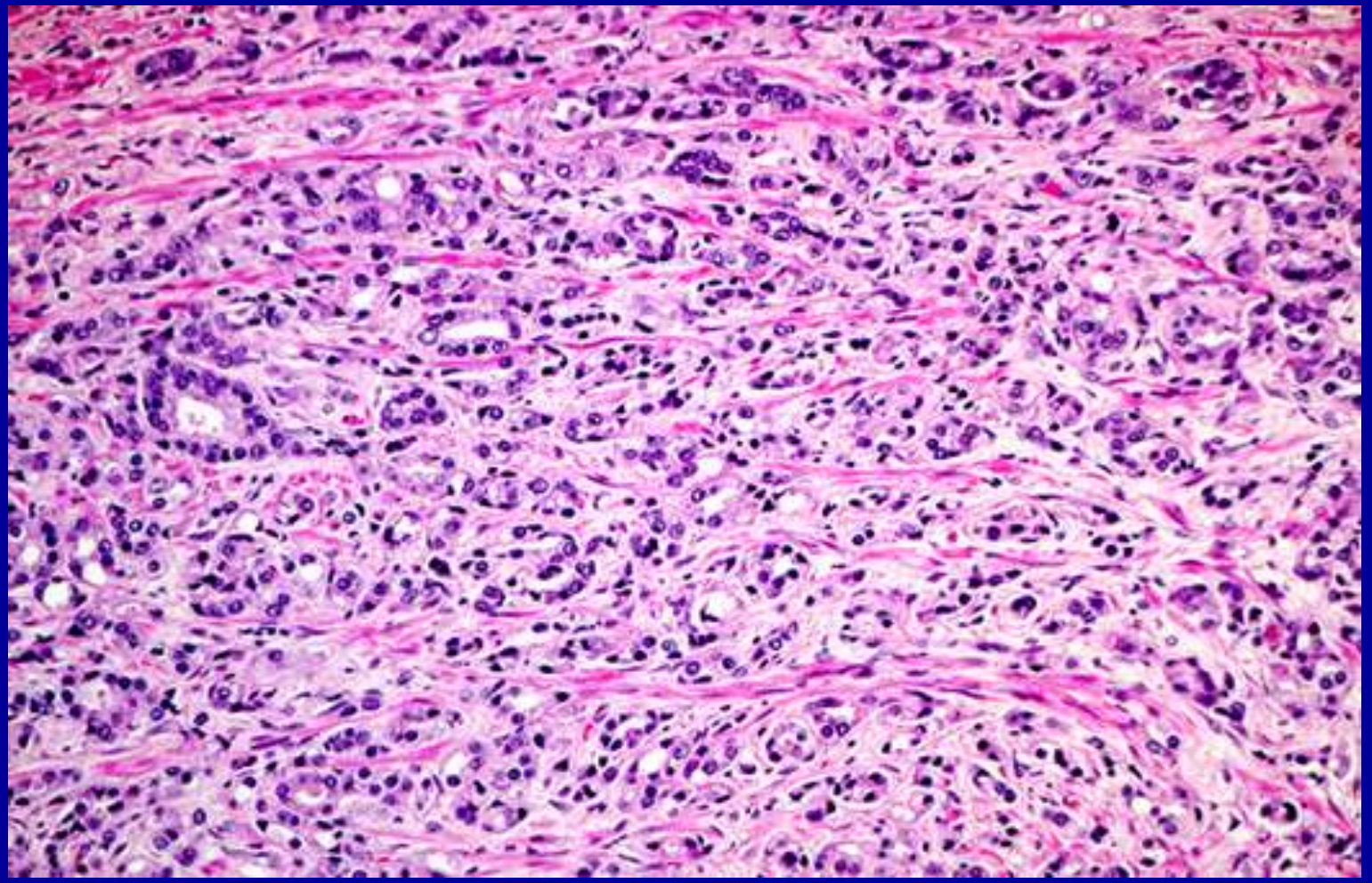
EPITELNI TUMORI

5A-SKORO SOLIDNE, OKRUGLE MASE, KOMEDO NEKROZA



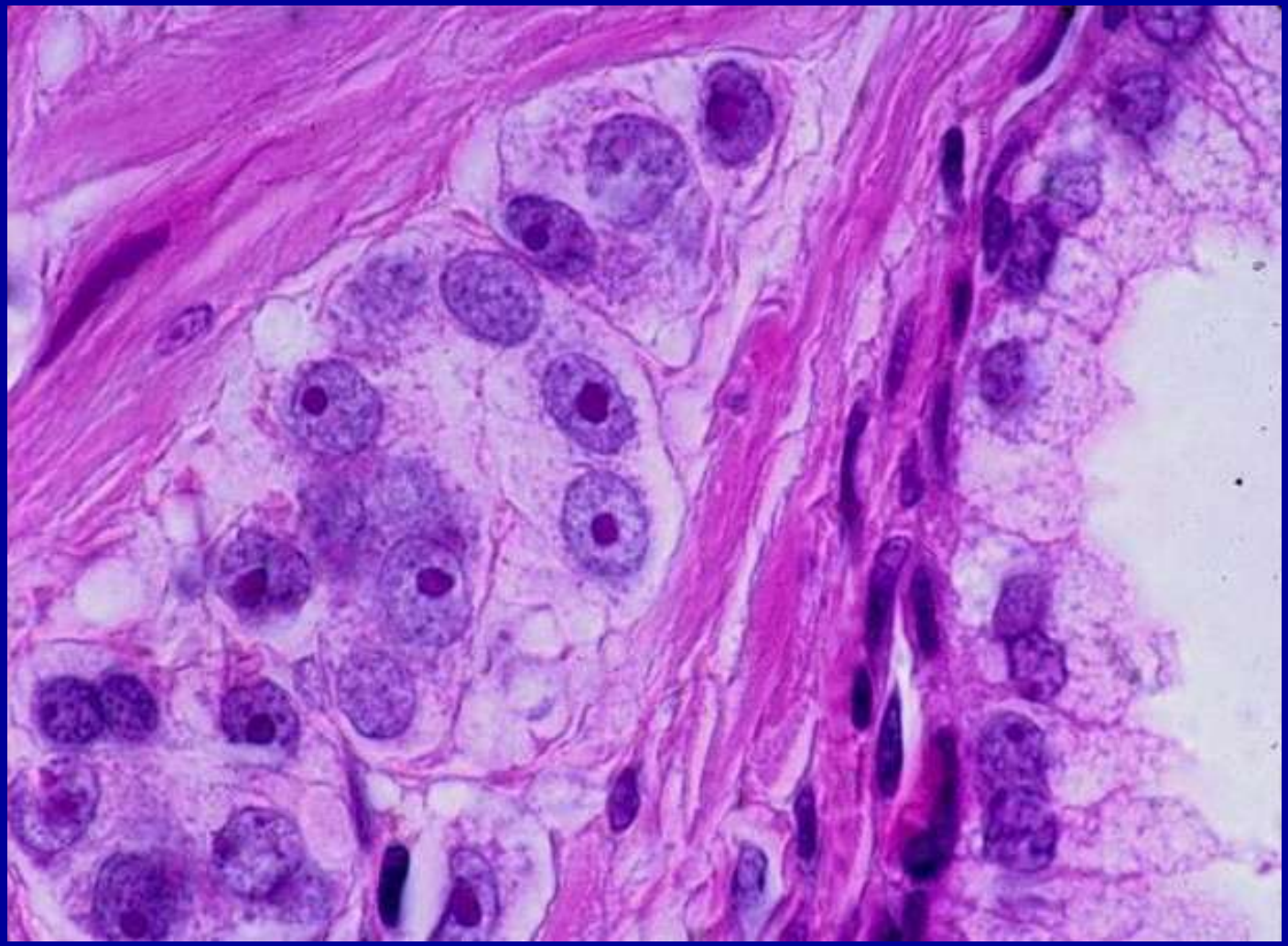
EPITELNI TUMORI

5B anaplasticne, infiltrativni



EPITELNI TUMORI

NUKLEARNA ANAPLAZIJA

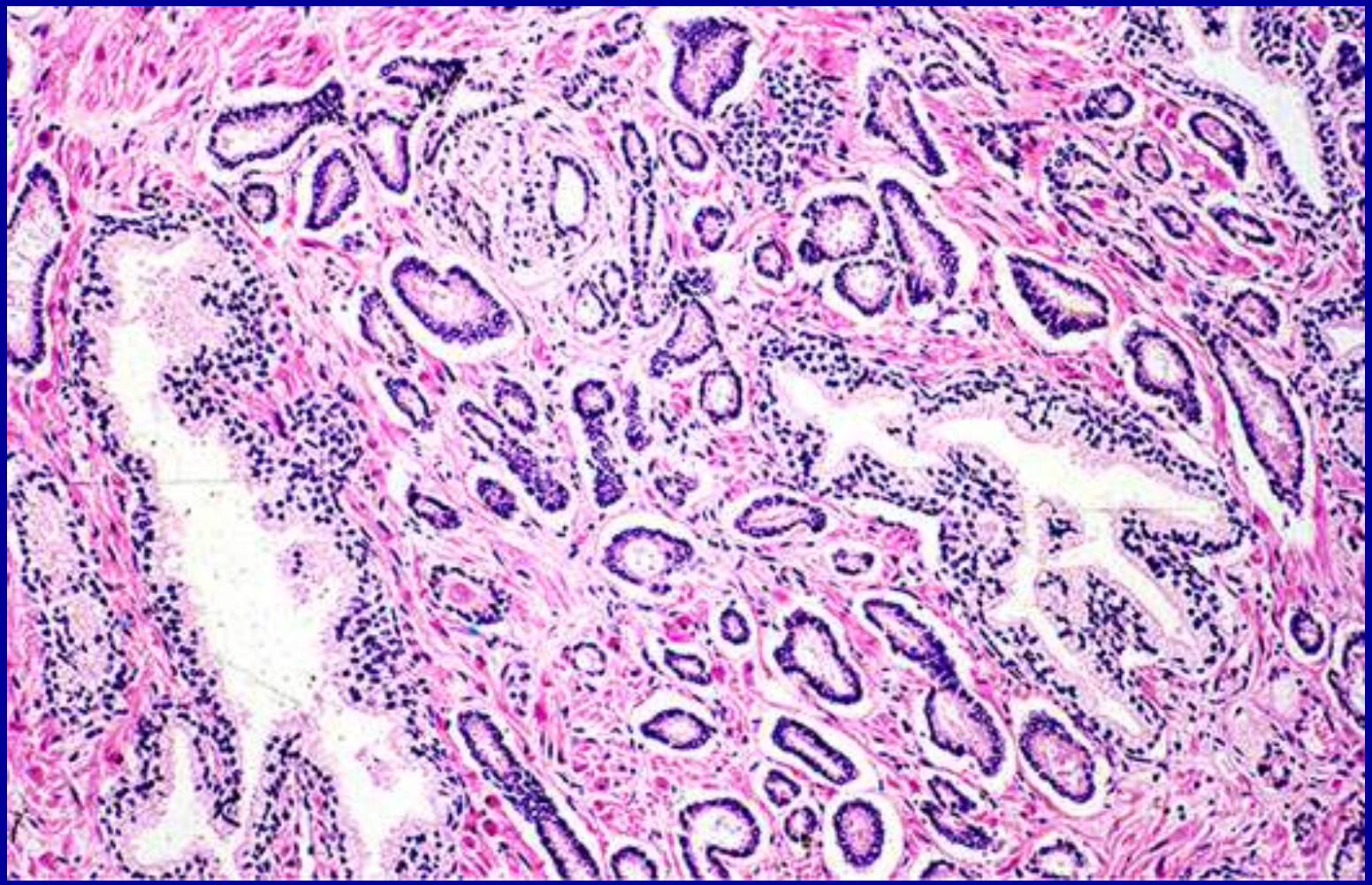


EPITELNI TUMORI

- DIJAGNOZA PCA-PATOHISTOLOSKOM ANALIZOM BIOPTIRANOG ILI OPERATIVNOG MATERIJALA.
- H&E, PSA, PAP, CK 34BE12, PSMA (prostaticni specificni membranski antigen),
- AMACR(a-Methyl-CoA racemase)

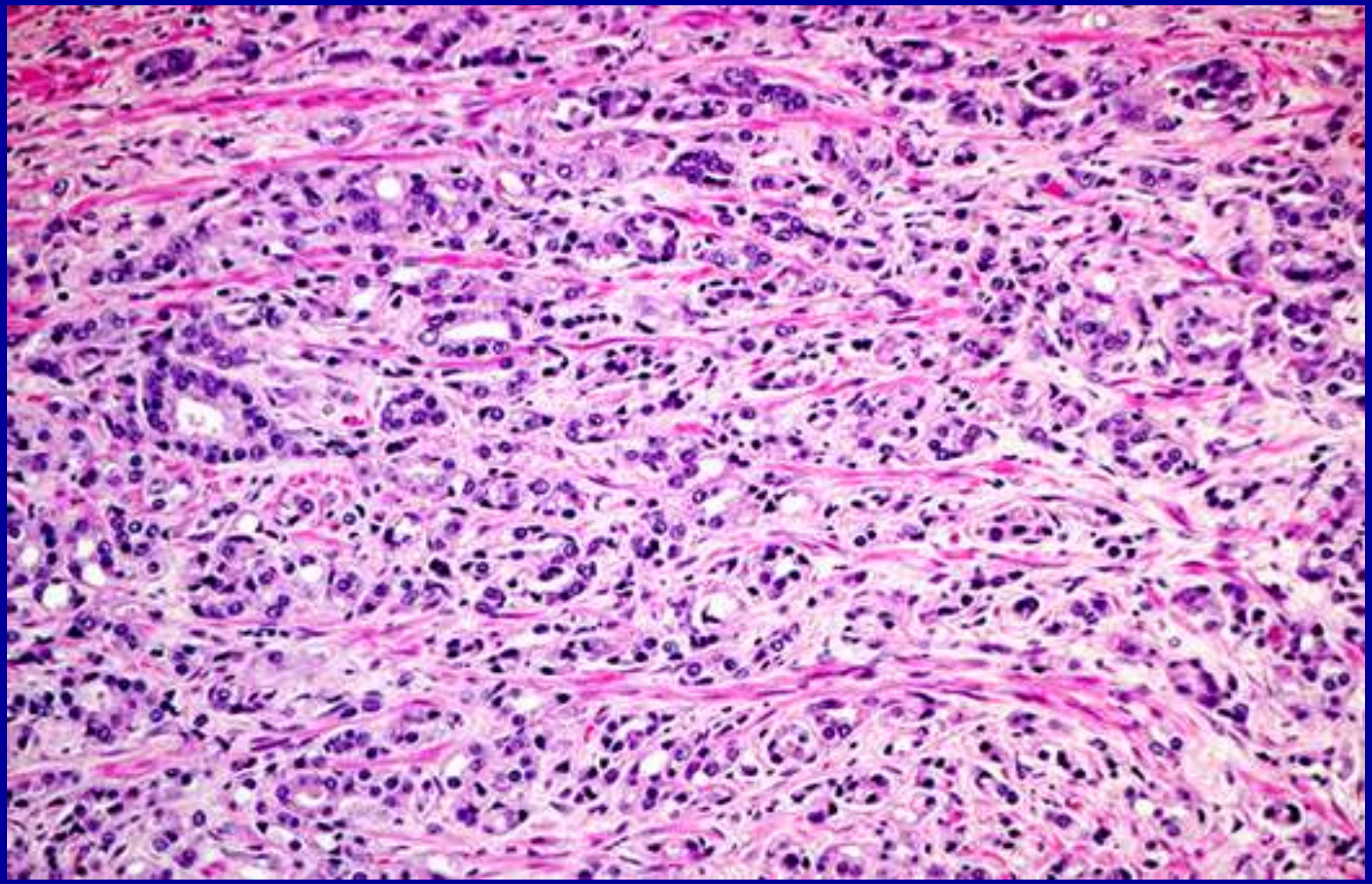
EPITELNI TUMORI

GLANDULARNA MORFOLOGIJA



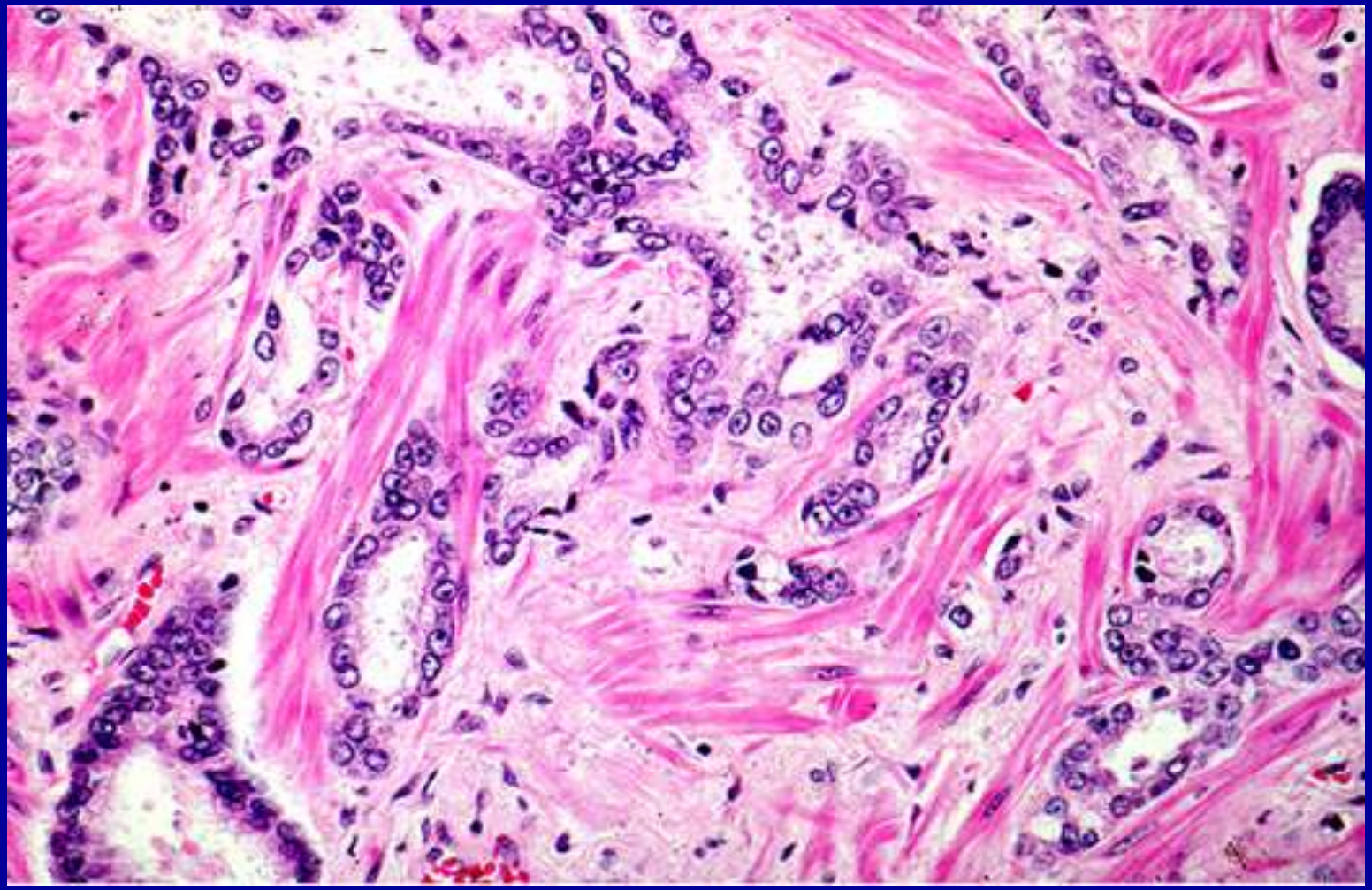
EPITELNI TUMORI

INVAZIVNA STROMALNA DISPERZIJA



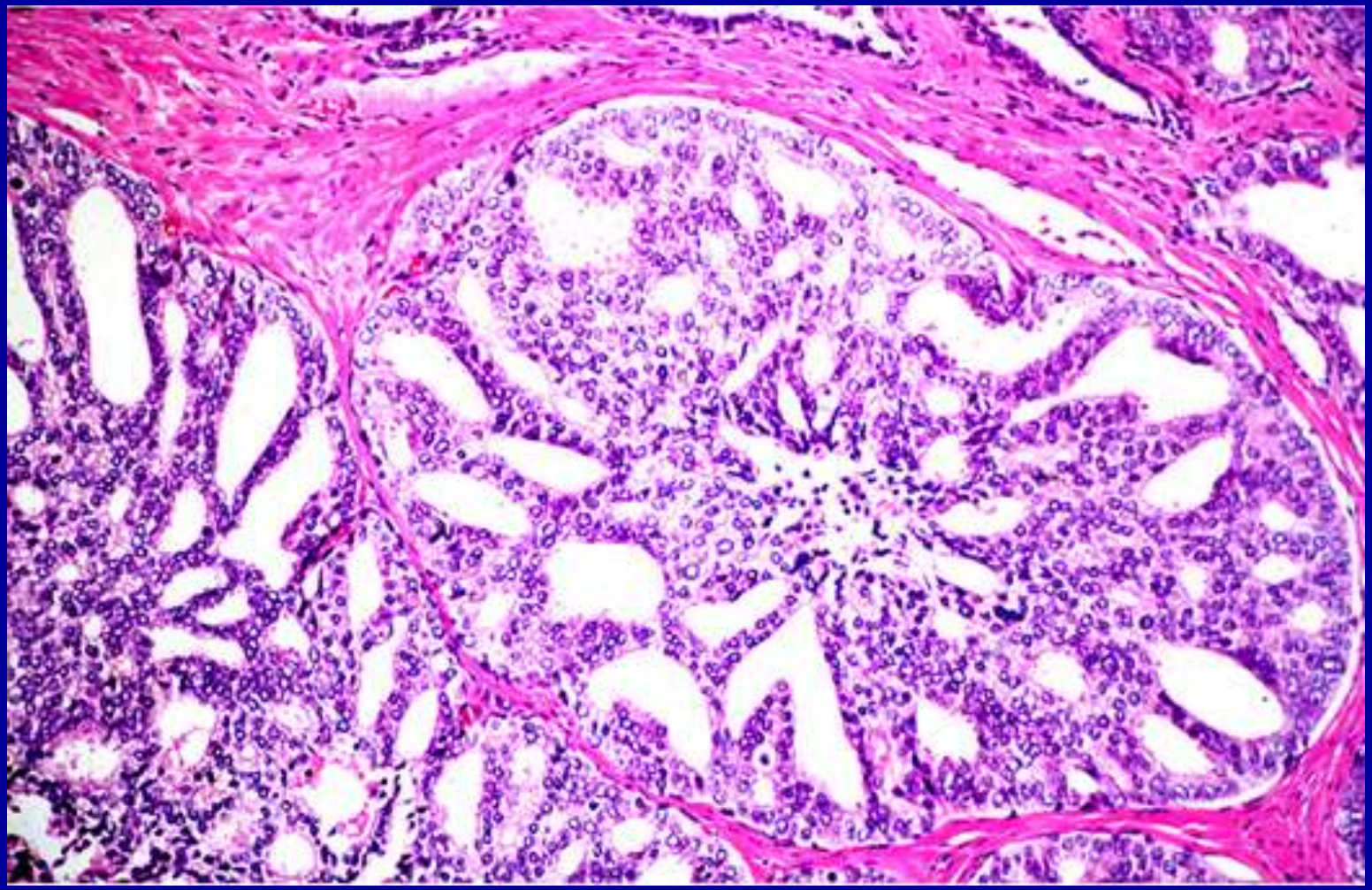
EPITELNI TUMORI

VARIJANTE –NACIN RASTA-IZGLED ACINARNI



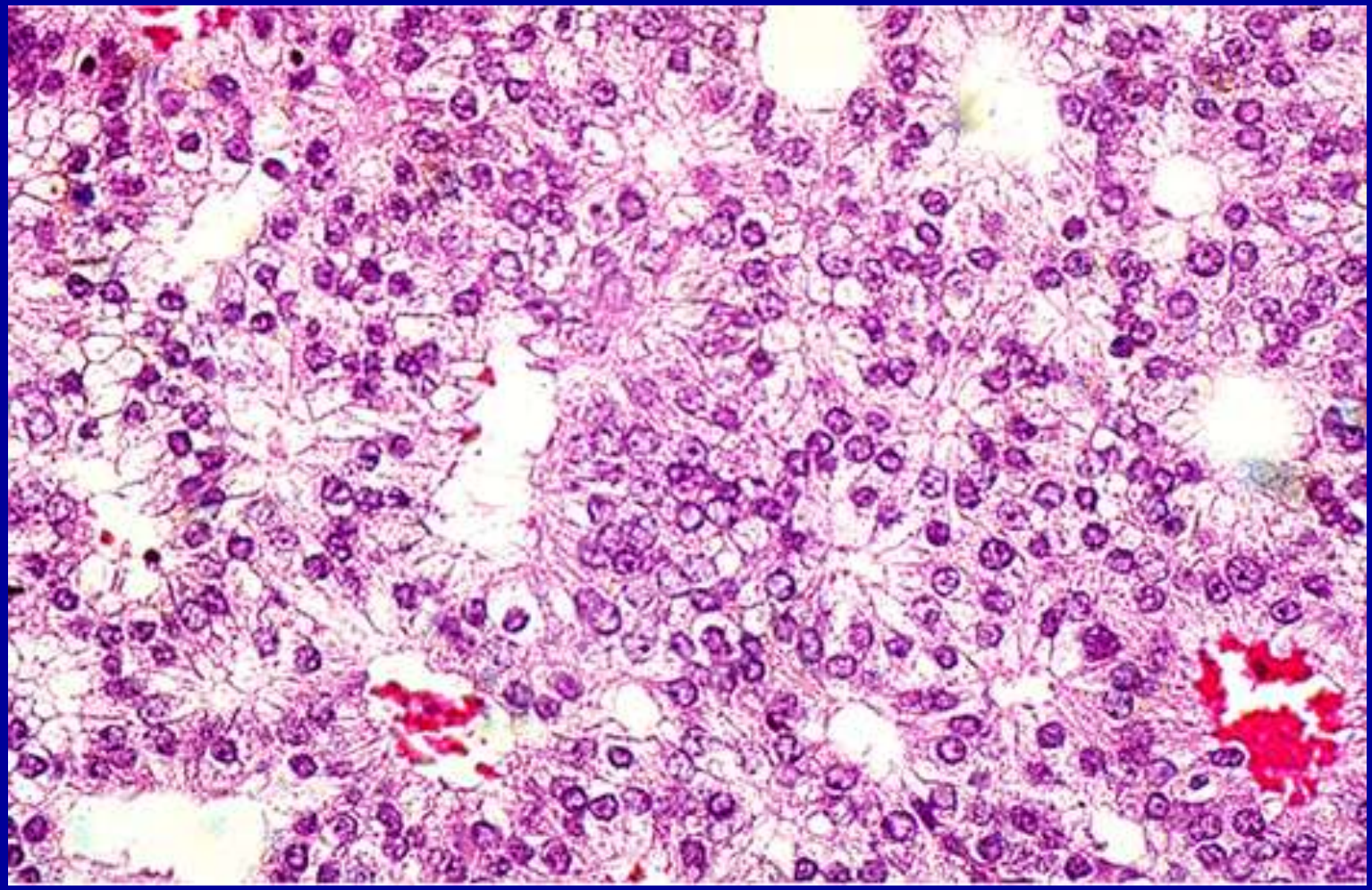
EPITELNI TUMORI

KRIBRIFORMNI



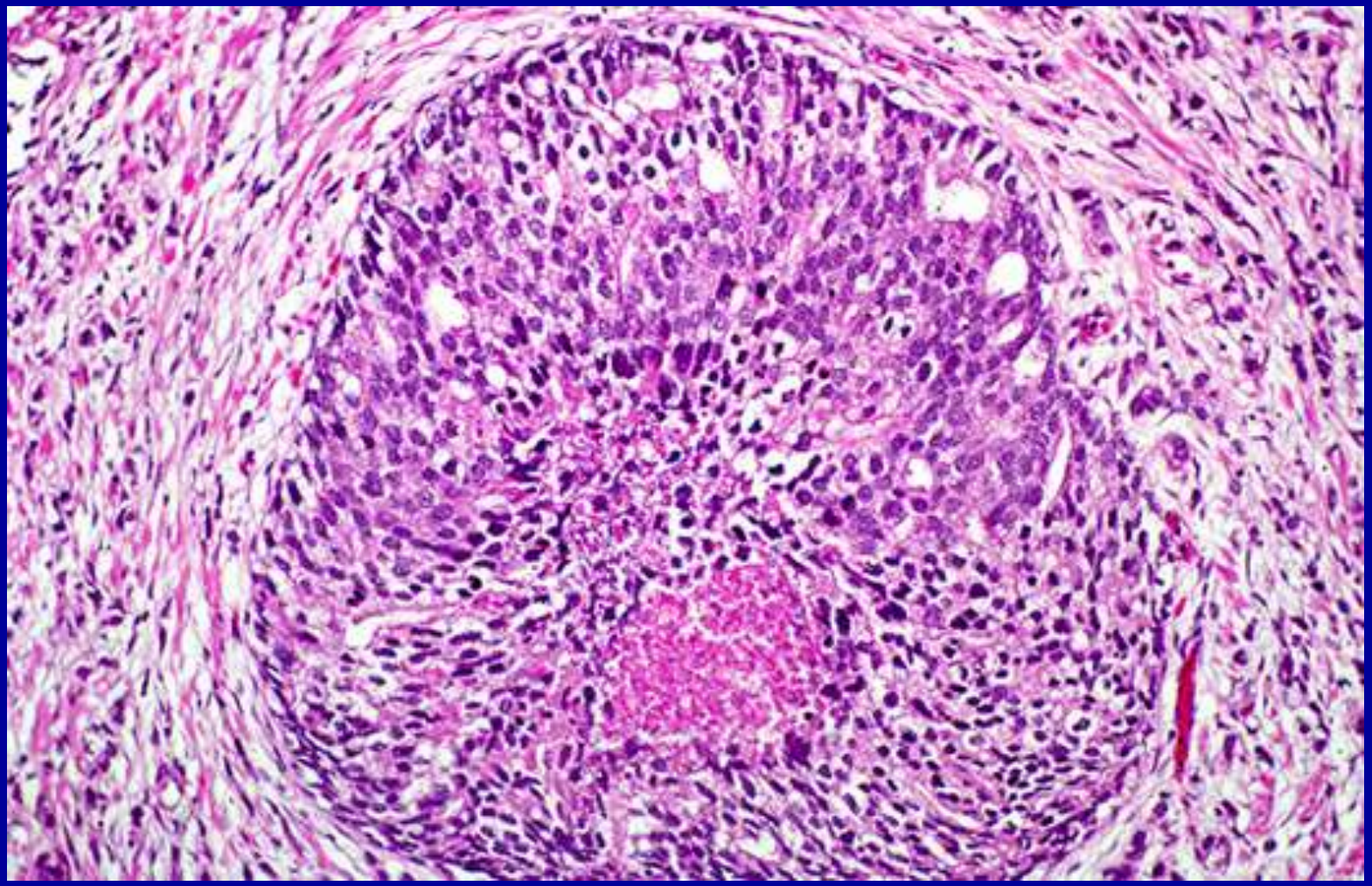
EPITELNI TUMORI

FUSED GLANDS



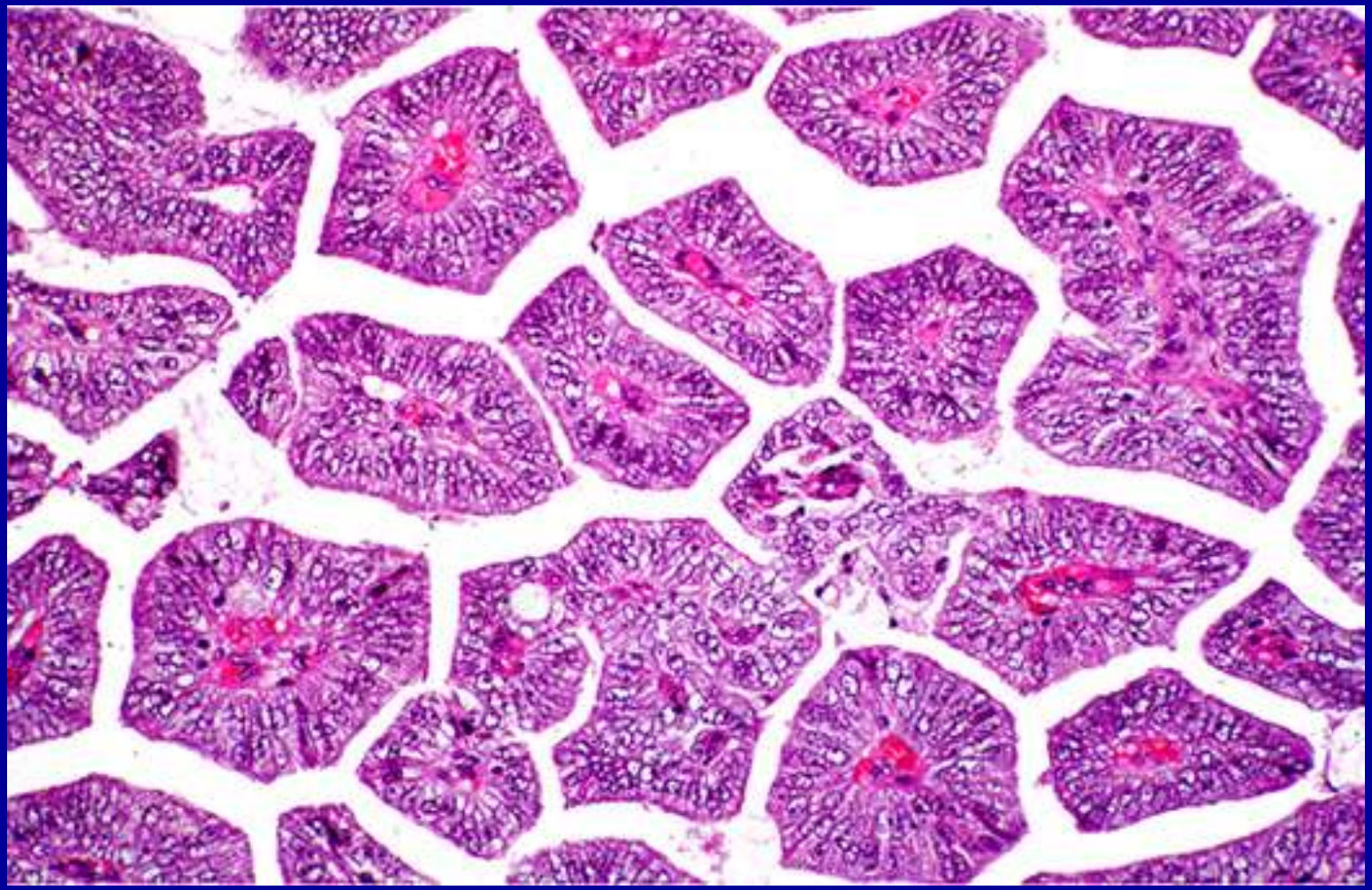
EPITELNI TUMORI

SOLIDAN/TRABEKULARAN



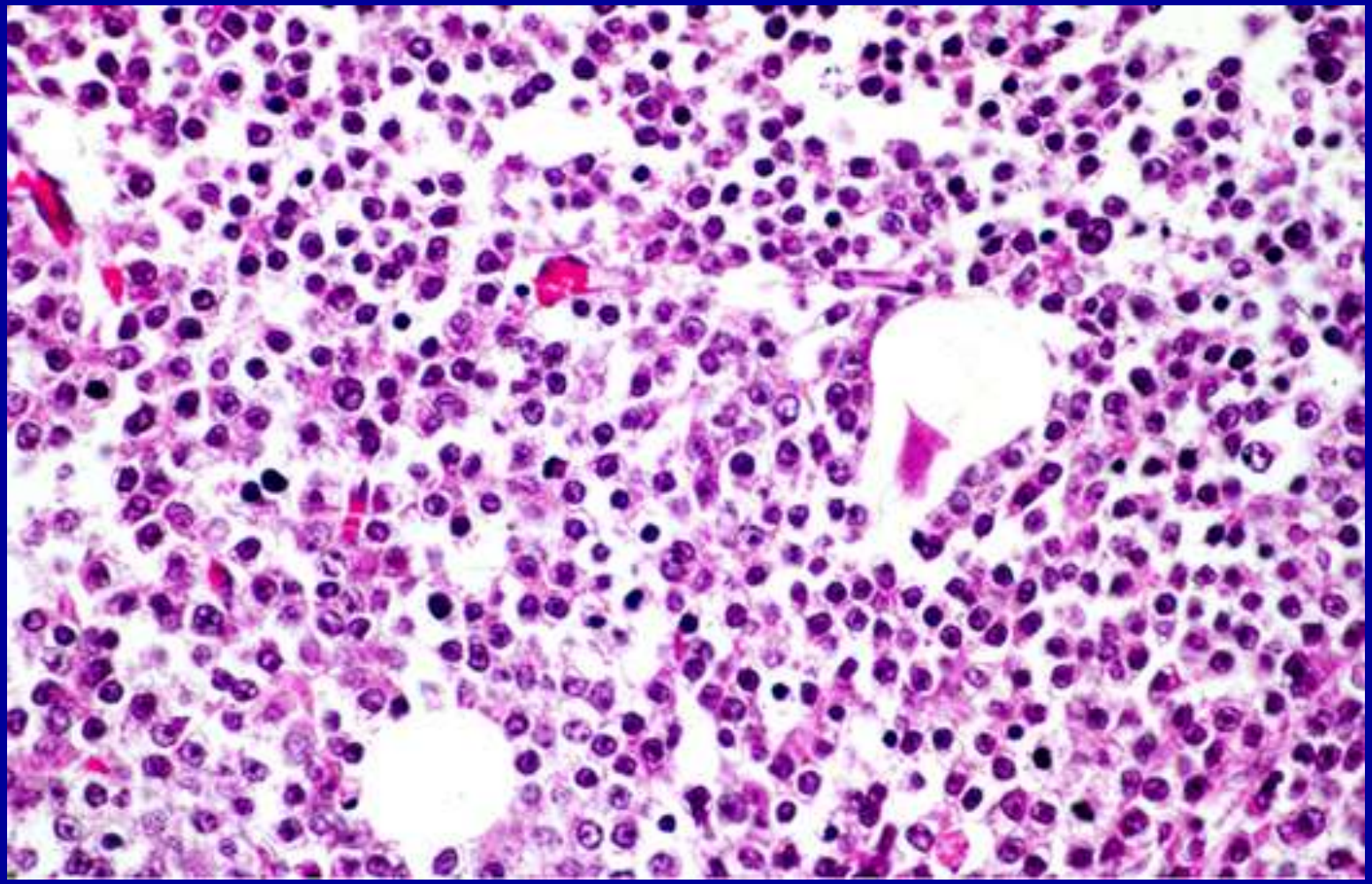
EPITELNI TUMORI

PAPILARNI



EPITELNI TUMORI

SMALL CELL CARCINOMA



EPITELNI TUMORI

- Needle core biopsy
  - gradus, broj pozitivnih isecaka i procenat sa PC
  - -minimum 3 nivoa
  - TRUS- multiple biopsije

EPITELNI TUMORI

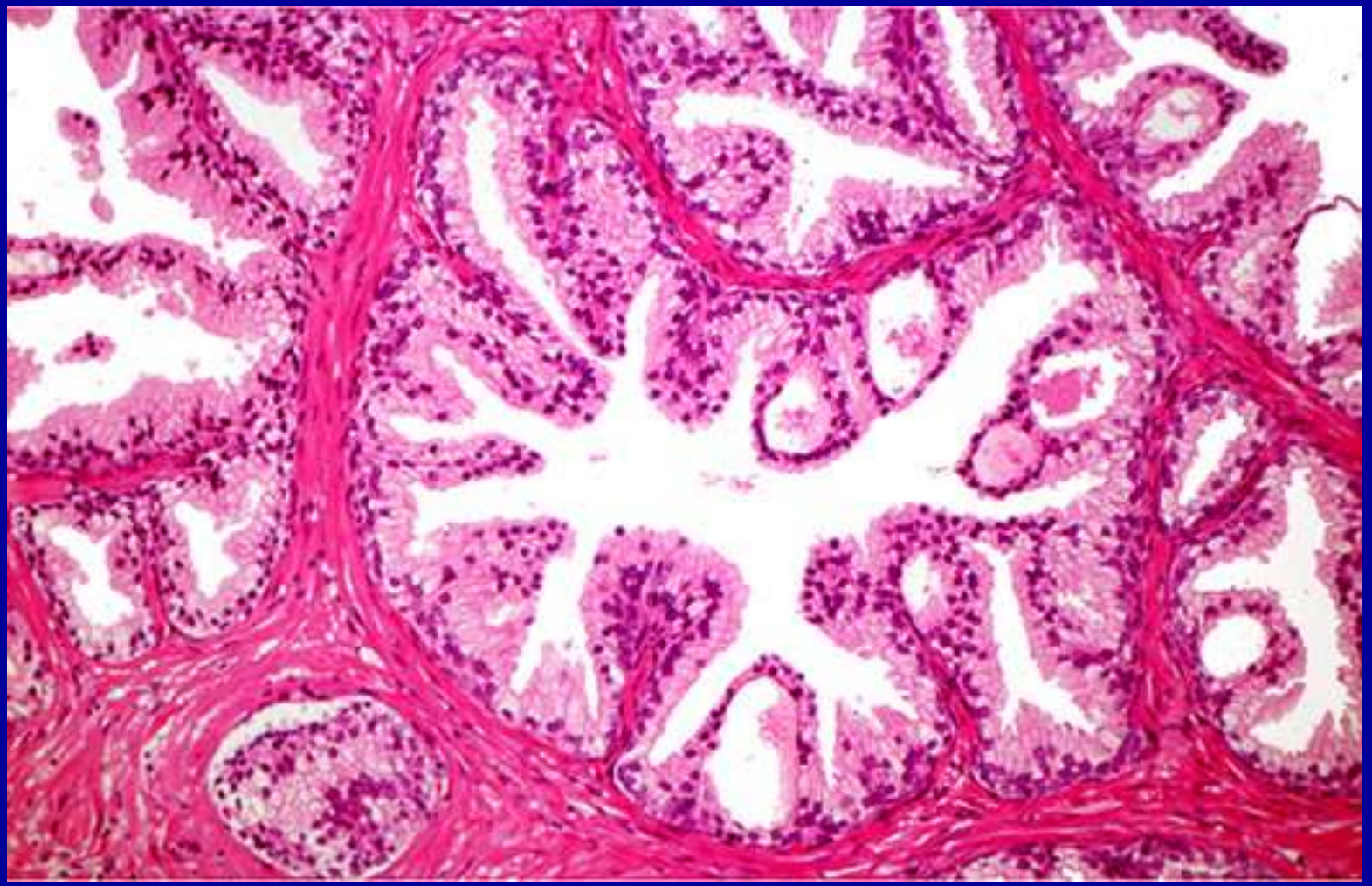
- TUR- svi uzroci se analiziraju
  - Prostatectomy-
  - Fiksacija, usiti sva ostecenja.
  - velicina, promeri, tezina, broj tumorskih fokusa, volumen, mesto, celijski tip, najveci stepen hir. margine, ekstraprostaticna ekstenzija, vaskularna, limfaticka , perineuralna invazija, neurovaskularno stablo zahvacenost, PIN

EPITELNI TUMORI

SARKOM PROSTATE

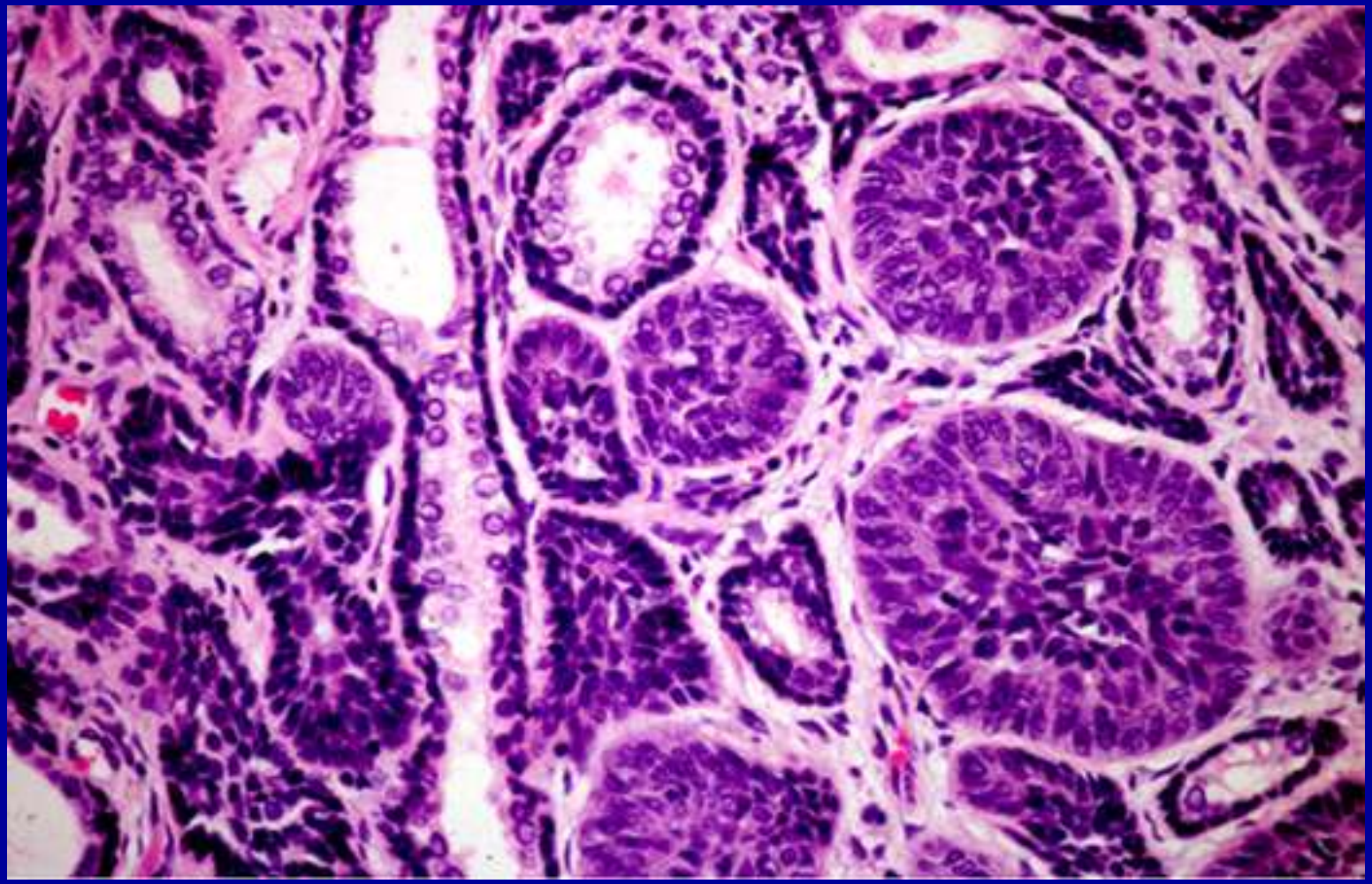
BENIGNE PROMENE

HYPERPLASIA



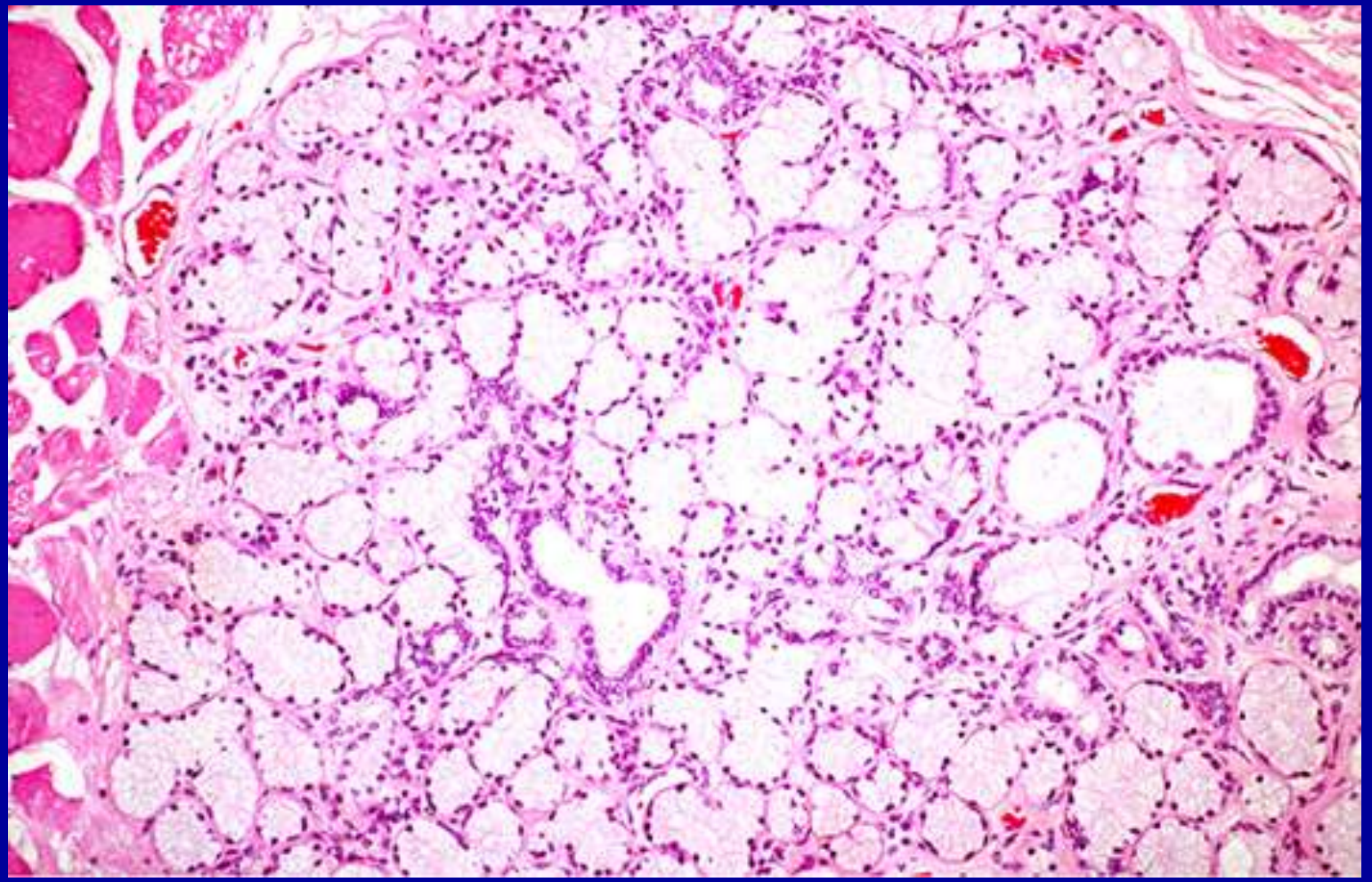
BENIGNE PROMENE

BASAL CELL HYPERPLASIA



BENIGNE PROMENE

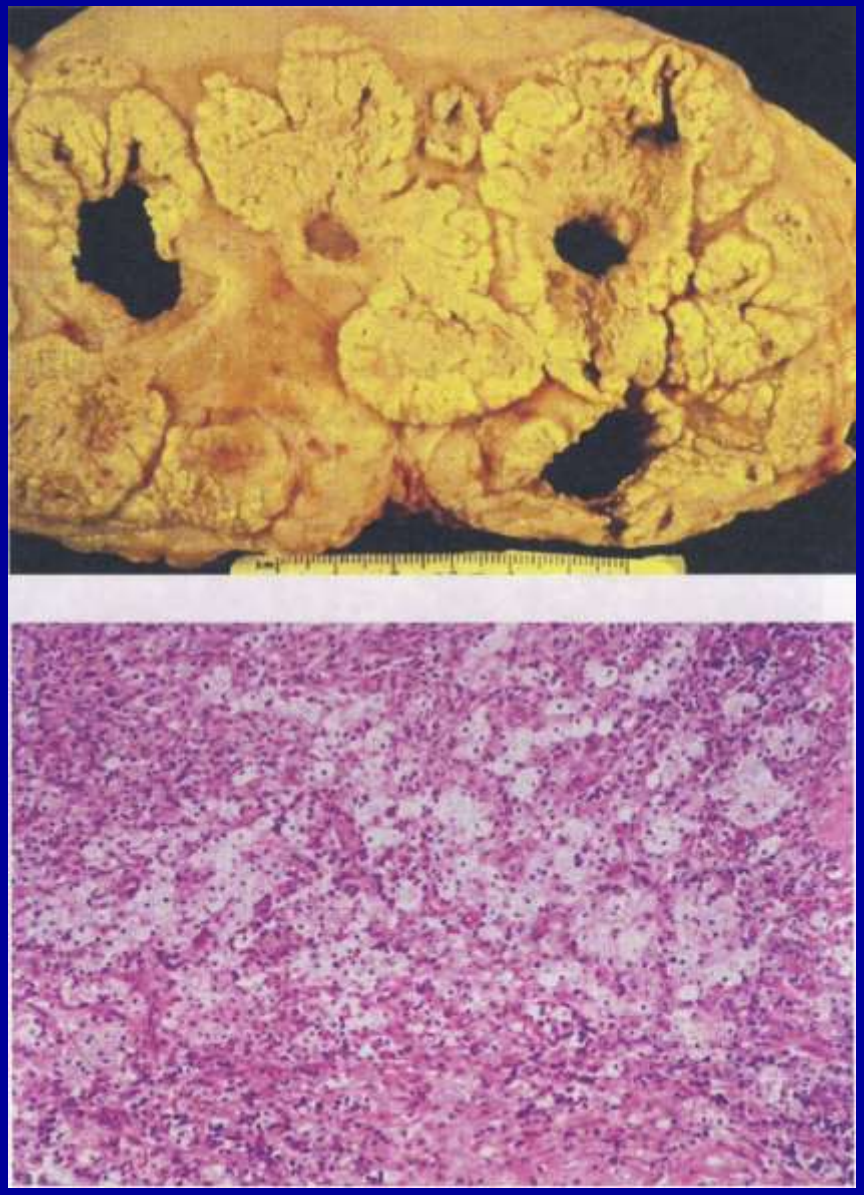
COWPER GLAND



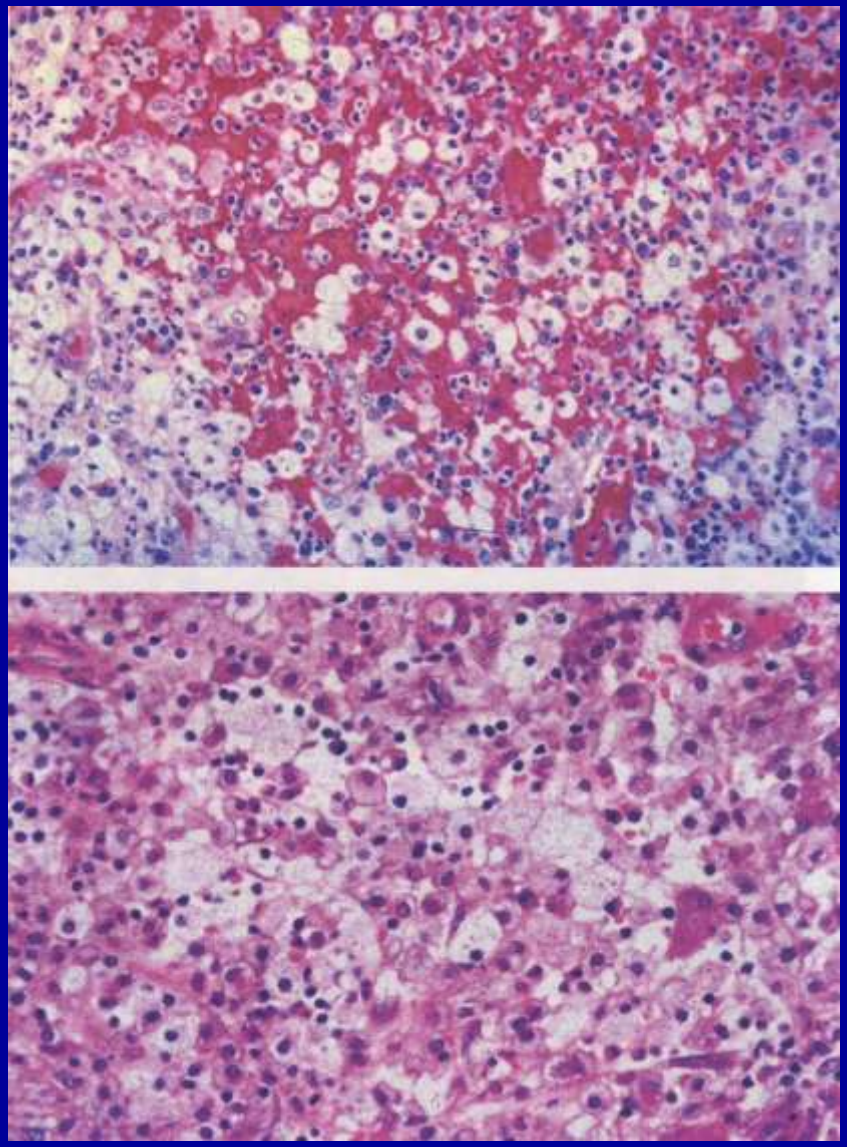
TUMORI I TUMOR-LIKE PROMENE SEMENIH KESICA

- EPITELNI TUMORI
  - Adenofibrom
  - Adenokaricnom
    - primarni
    - sekundarni(prostata)
- NEEPITELILJALNI TUMORI
- Tumor mekih tkiva-fibromi, leiomiomi.
- TUMOR-LIKE PROMENE
- AMILOIDOZA
- CISTE

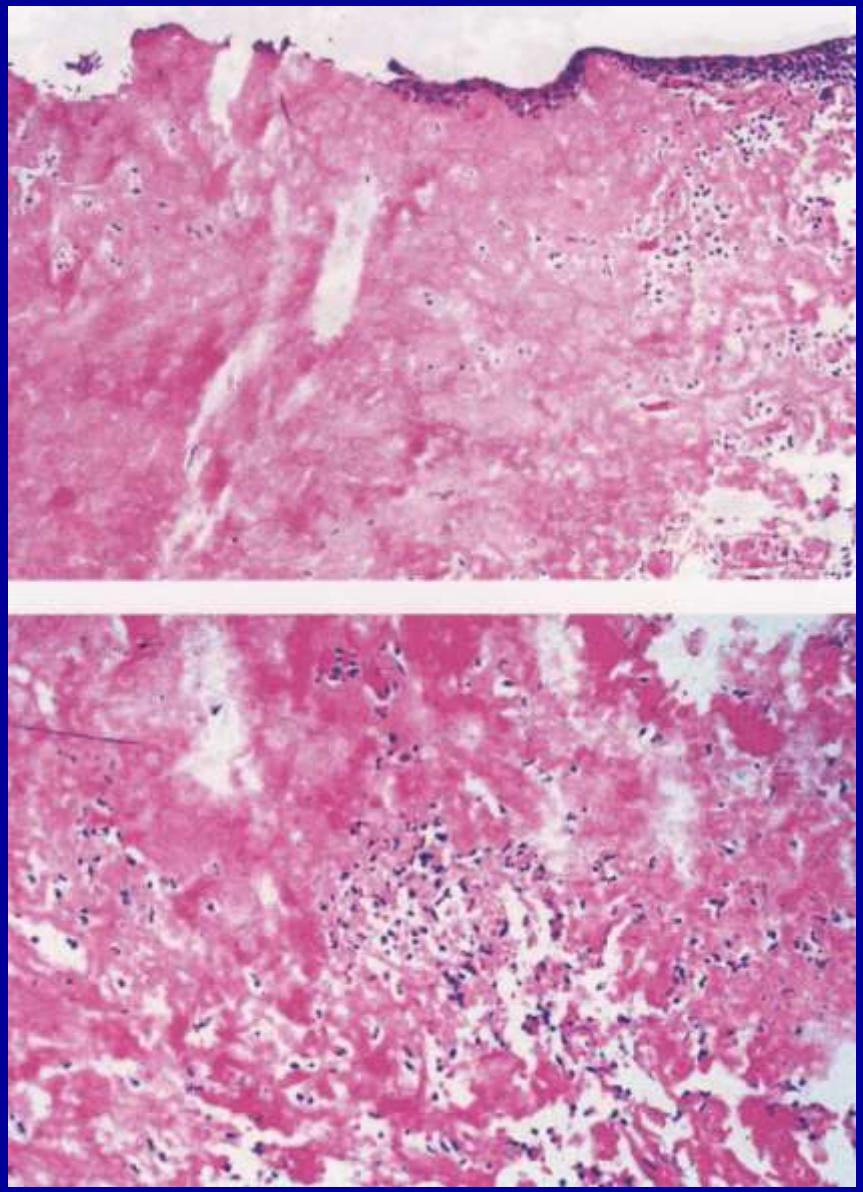
CASE 1



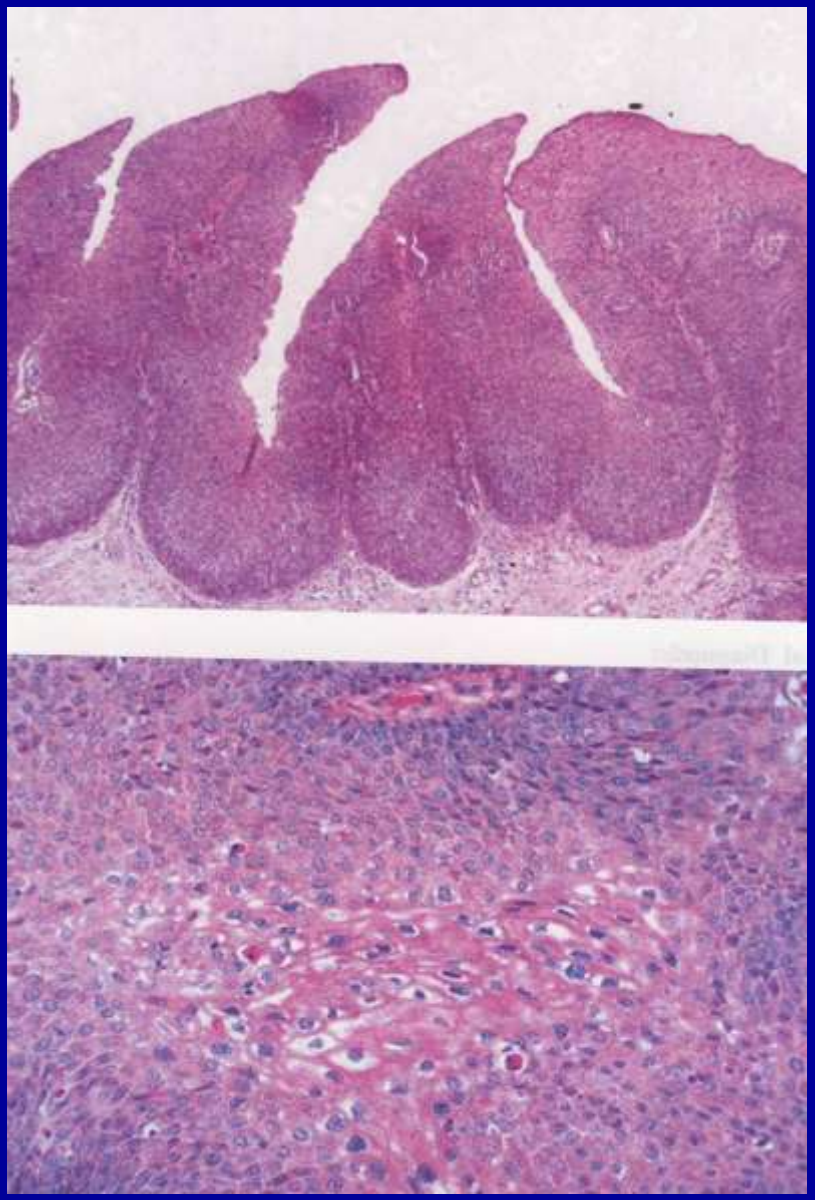
CASE 1



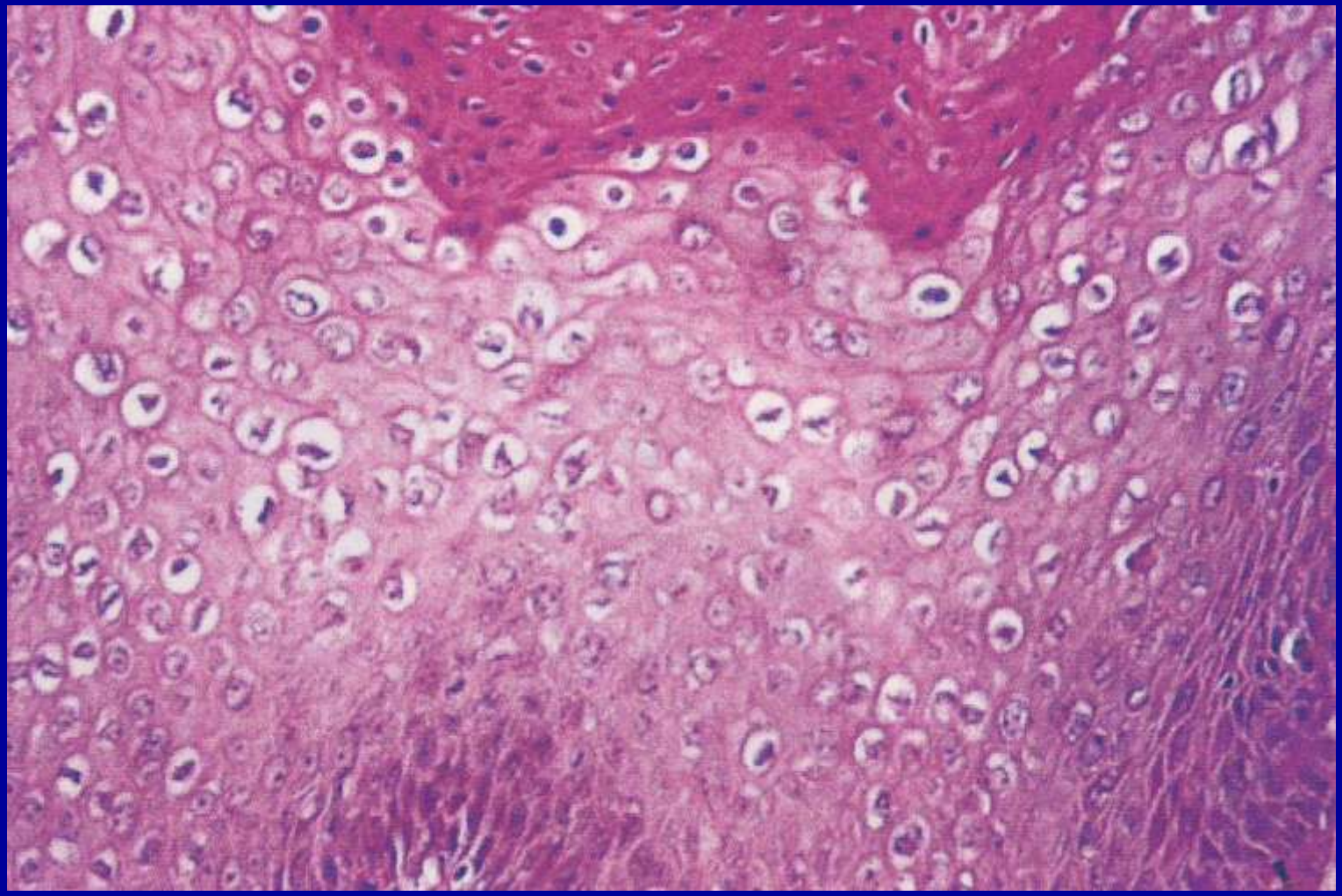
CASE 2



CASE 3



CASE 3



PREOPERATIVNA I INTRAOPERATIVNA DIJAGNOSTIKA U HIRURŠKOJ PATOLOGIJI UROGENITALNOG TRAKTA

Prim. dr R. Radosavljević, ass mr sci med
Patohistološka laboratorija dr Radosavljević - US Medical School

ЛЕКАРСКА КОМОРА СРБИЈЕ
SERBIAN MEDICAL CHAMBER

DANI SRPSKE MEDICINSKE DIJASPORE 2012