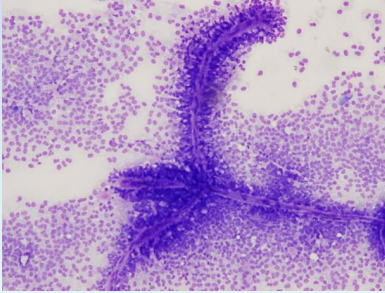


solide en cysteuze laesies van de pancreas



Sybren L. Meijer
09-11-2023



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Dagelijkse praktijk cytologie

Meest voorkomende (solide) afwijkingen

- Ductaal adenocarcinoom
- Neuro endocriene tumor

Meer zeldzame (solide) epitheliale afwijkingen

- Acinar cell carcinoma
- Solid pseudopapillary tumor
- Pancreatoblastoom
- Metastase naar pancreas

2

Dagelijkse praktijk cytologie

Cysteuze tumoren

Benigne

- Pseudocyste (>90%)

Neoplastisch

- Mucineuze cyste
- Sereus cystadenomas

Solide tumor met cysteuze veranderingen

3

Dagelijkse praktijk cytologie

Morfologische diagnose

- Rangschikking
- Celtype
- Achtergrond

Beeldvorming (verbinding ductus pancreaticus!)

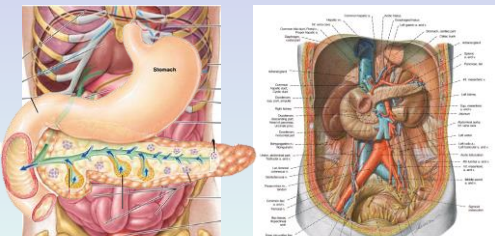
Immuunhistochemie + NGS

Klinisch beeld en voorgeschiedenis

Chemisch laboratorium bepaling

4

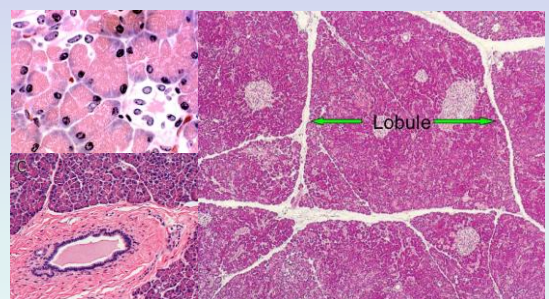
Cytologie: hoe?



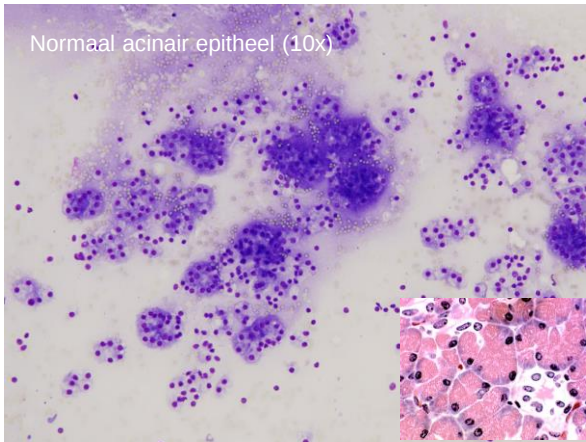
Contaminatie - achtergrond

5

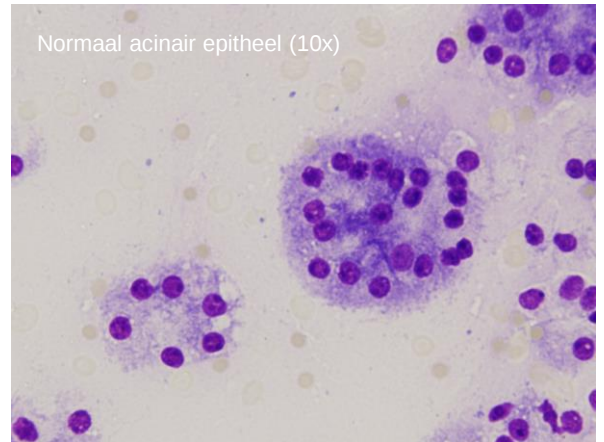
Normale achtergrond pancreas



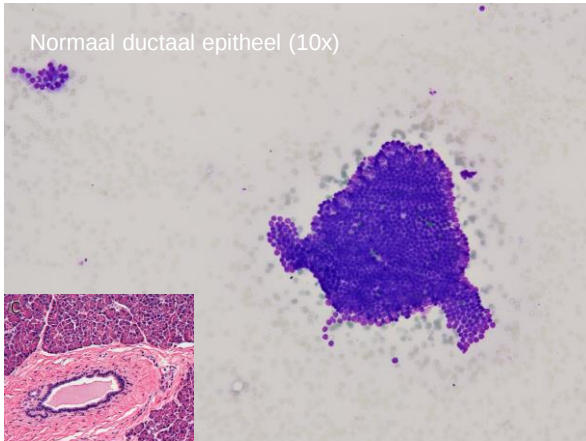
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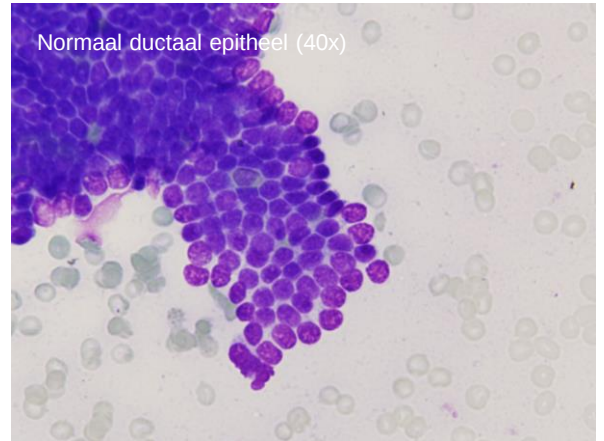
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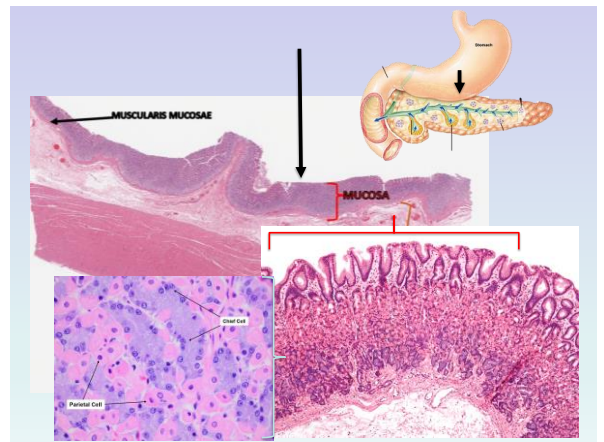


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Contaminatie & achtergrond locatie van de afwijking

- Afwijking  in pancreas corpus of staart → punctie door maag

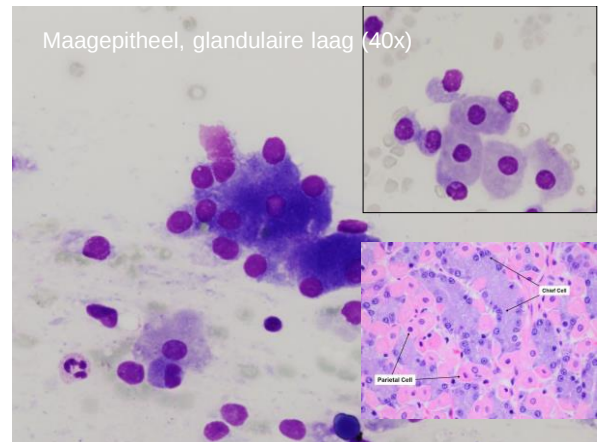
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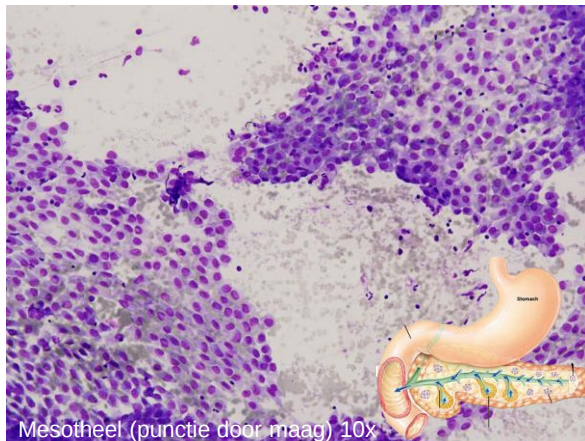
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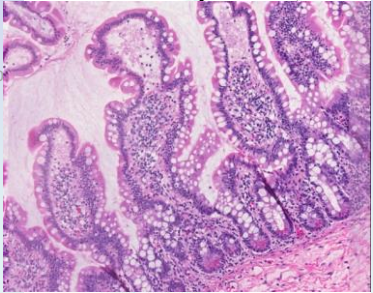
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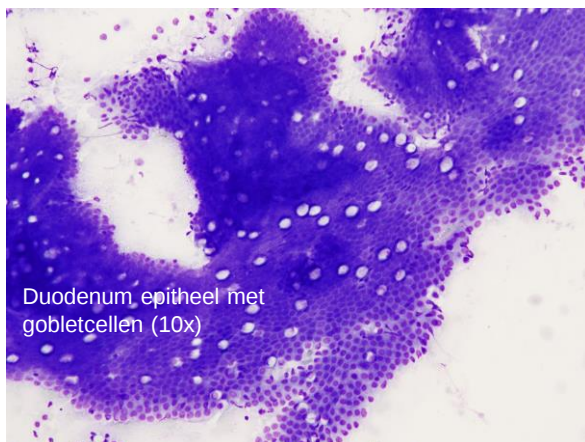
15

Contaminatie & achtergrond locatie van de afwijking

- Afwijking in pancreas corpus of staart → punctie door maag
- Afwijking  in pancreas kop → punctie door duodenum



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Dagelijkse praktijk cytologie

Meest voorkomende (solide) afwijkingen

- Ductaal adenocarcinoom
- Neuro endocriene tumor

Meer zeldzame (solide) epitheliale afwijkingen

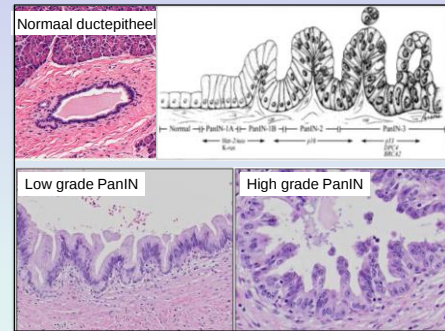
- Acinar cell carcinoma
- Solid pseudopapillary tumor
- Pancreatoblastoom
- Metastase naar pancreas

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Ductaal adenocarcinoom (PDAC)

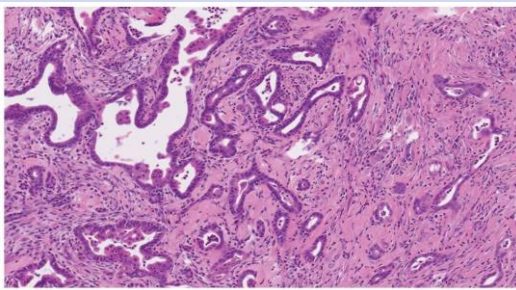
- Invasieve epitheliale maligniteit met glandulaire (ductale) differentiatie
- 7^{de} meest voorkomende oorzaak van kanker gerelateerde sterfte in de wereld (450,000 / jaar)
- Geografische verschillen; Man : vrouw 1,1:1
- Zeer slechte prognose,
 - overall 5-jaar overleving: 8%
 - 5-jaar overleving na resectie: 15-25% (afhankelijk van stadium, tumor diameter, LN en R0 status).
- Risicofactoren: roken, dieet (obesitas), diabetes mellitus, chronische (familiaire) pancreatitis

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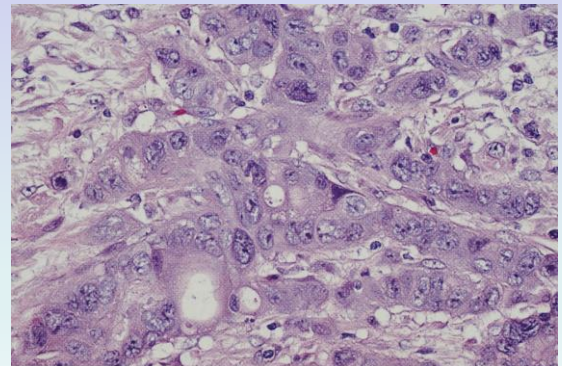
20

Ductaal adenocarcinoom



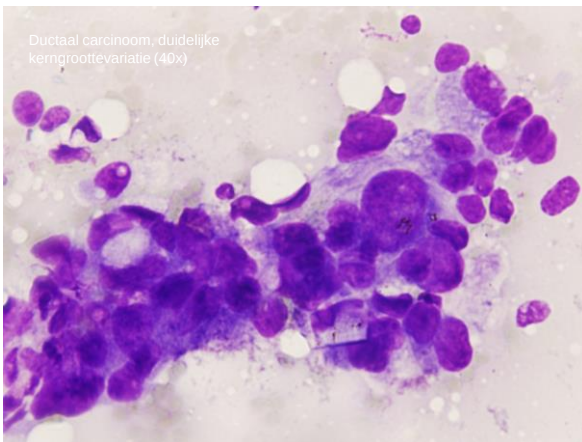
21

Ductaal adenocarcinoom



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Ductaal carcinoom, duidelijke kerngroottevariatie (40x)

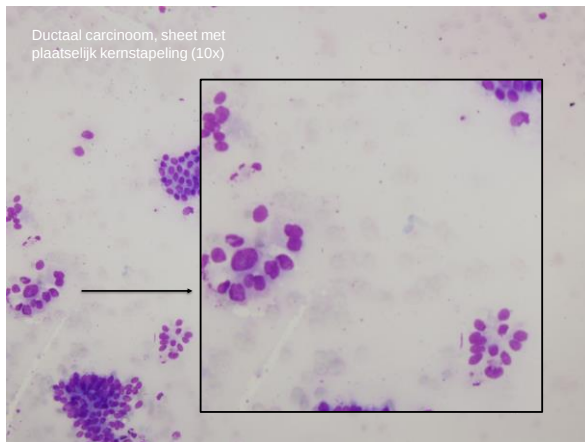


23

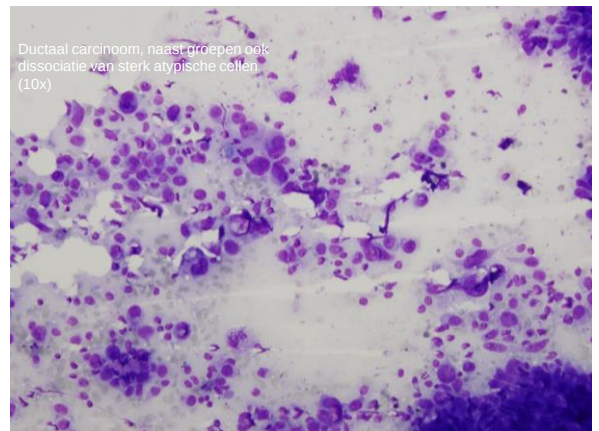
Cytologie PDAC

- Vaak celrijk
- Mix van (glandulaire) clusters en losse cellen
- Wanordelijke rangschikking
Kernvorming en kernoverlap
- Polymorf kernbeeld (variatie 1:4 binnen een groep)
- Subtieler in goed gedifferentieerd adenocarcinoom

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25

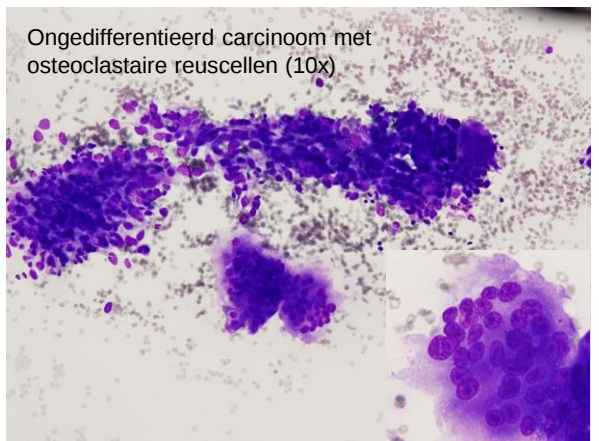


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Histologische types

- Ductaal adenocarcinoom (PDAC)
- Adenosquamous carcinoom
- Colloid carcinoom
- Hepatoid carcinoom
- Medullair carcinoom
- Zegelring ring cel carcinoom
- Ongedifferentieerd NOS
- Ongedifferentieerd + osteoclast achtige reuscellen

27



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Dagelijkse praktijk cytologie

Meest voorkomende (solide) afwijkingen

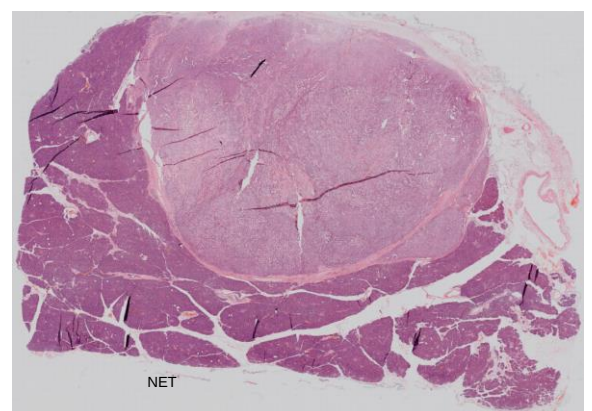
- Ductaal adenocarcinoom
- Neuro endocriene tumor

→ Δ therapie

Meer zeldzame (solide) afwijkingen

- Acinar cell carcinoma
- Solid pseudopapillary tumor
- Pancreatoblastoom
- Metastase naar pancreas

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Cytologie NET

- Celrijk
- Schone achtergrond
- Dissociatieve rangschikking
- Plasmacytoid celtype
- Uniform kernbeeld (gering –matig polymorf)
- Nauwelijks delingen

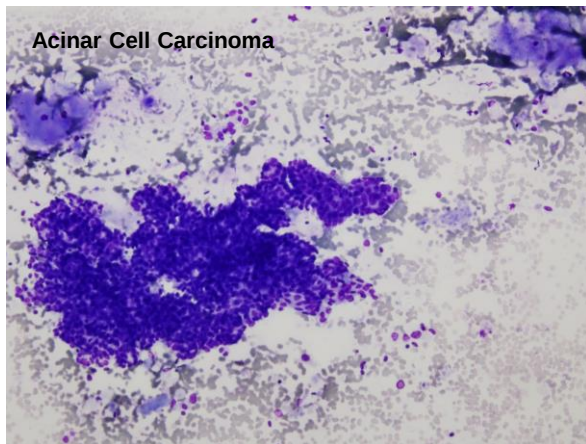
- 31



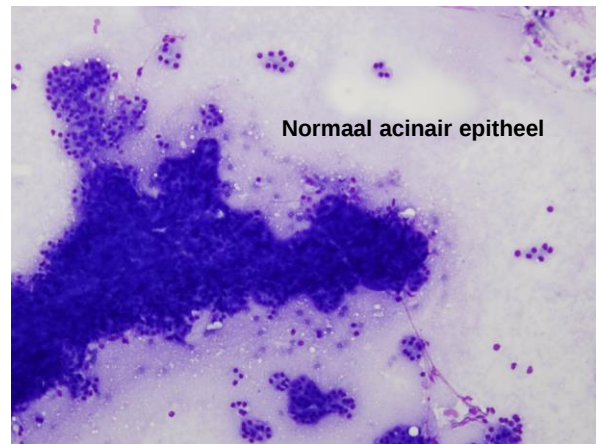
Zeldzaam: Acinar cell carcinoma

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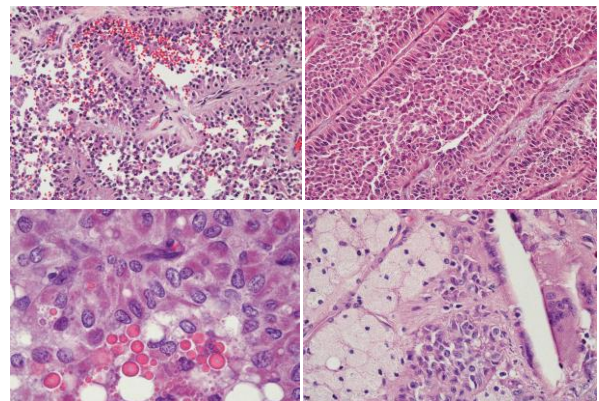


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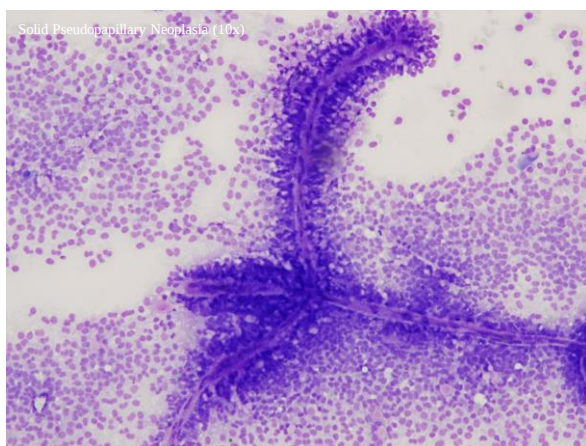
Zeldzaam: Solid pseudopapillary tumor

- Low grade malignant epithelial neoplasm composed of noncohesive polygonal cells that surround delicate blood vessels and form solid masses with frequent cystic degeneration and intracystic hemorrhage.
- Up to 6% of cystic pancreatic tumors
- Primarily in women in their twenties (89% female; 30% of tumors < 40 years of age)

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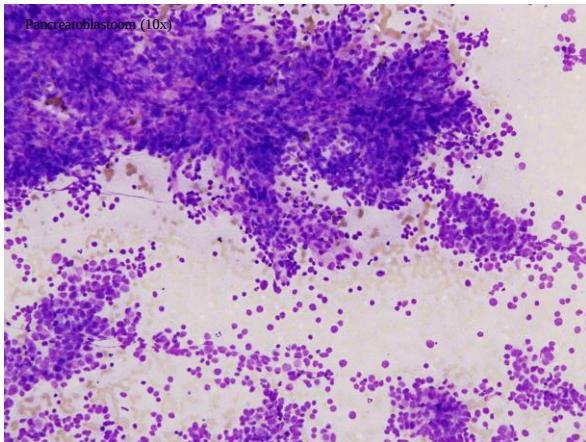


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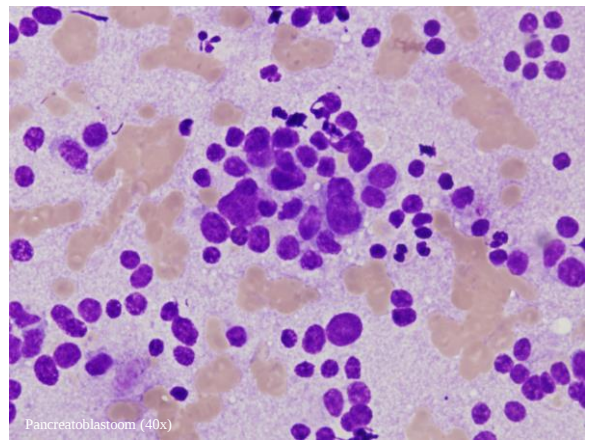
Zeldzaam: Pancreatoblastoma

- Maligne epitheliaal neoplasma van de pancreas (meerder differentiatie richtingen), met name acinair met squameuze differentiatie
- zeldzaam,
- exact incidentie onbekend? 2/3 in kinderen
- 25% van pediatric pancreas tumoren
- Aggressief beloop

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Cysteuze afwijkingen

Niet neoplastische cysteuze afwijking

- Pseudo cyste
- Lymfoepitheliale cyst

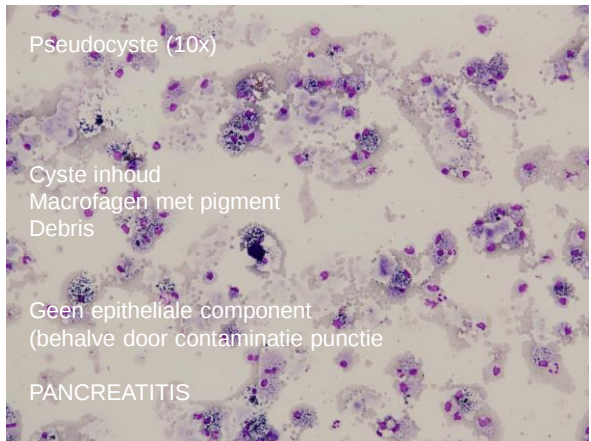
Sereus cystadenoma

Mucineuze Neoplastische cyste

- IPMN
- Mucinous cystic neoplasm

Solide tumor met cysteuze veranderingen

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Serous cystadenoom

- Incidentele bevinding bij beeldvorming
- Karakteristiek beeld op CT scan
- Pancreatic body or tail (50-75%)
no communication with the pancreatic duct.

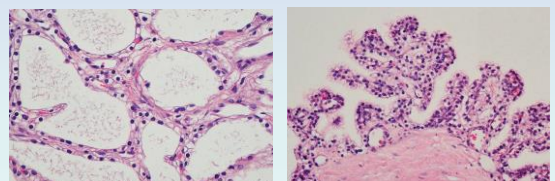
- Female : male = 3 :1
- 1-2% pancreas tumoren
- Hiervan maligne: 1-3 %
- Etiologie is onbekend (von Hippel Lindau)



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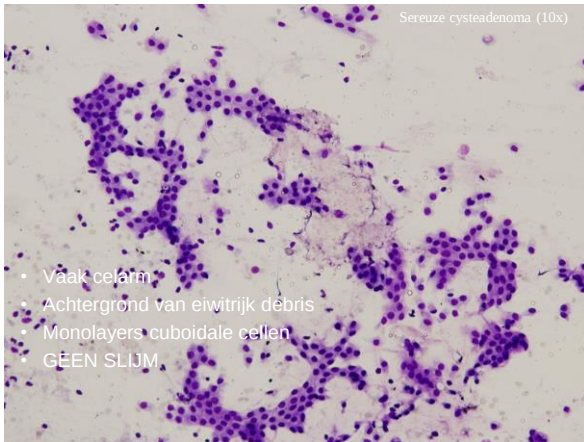
Serous cystadenoma

- Benign epithelial neoplasm composed of uniform cuboidal glycogen-rich cells that form numerous small cysts containing serous fluid.



Glycogeen: PAS en PAS-D

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- Vaak celarm
- Achtergrond van eiwitrijk debris
- Monolayers cuboidale cellen
- GEEN SLIJM

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Cysteuze afwijkingen

Niet neoplastische cysteuze afwijking

- Pseudo cyste
- Lymfoepitheliale cyst

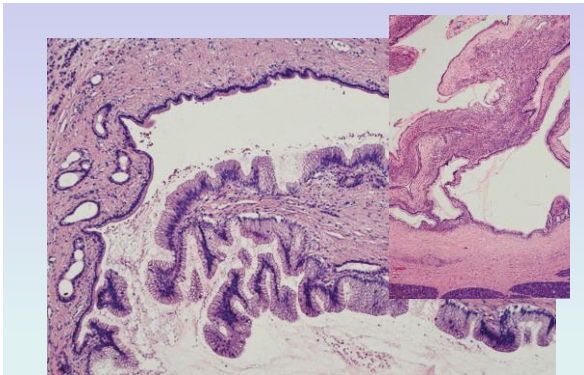
Sereus cystadenoma

Neoplastische mucineuze cyste

- IPMN
- Mucinous cystic neoplasm

Solide tumor met cysteuze veranderingen

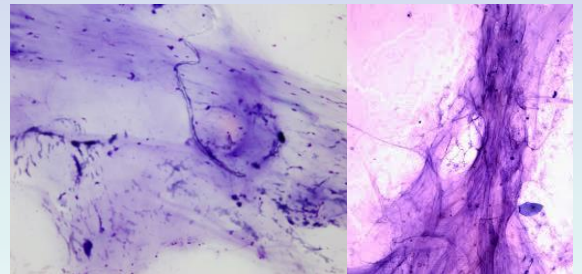
50



Onderscheid histologie IPMN en Mucineus cystadenoom?

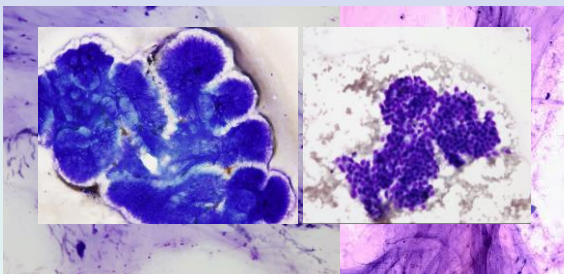
51

Cytologie Neoplastische Mucineuze Cyste

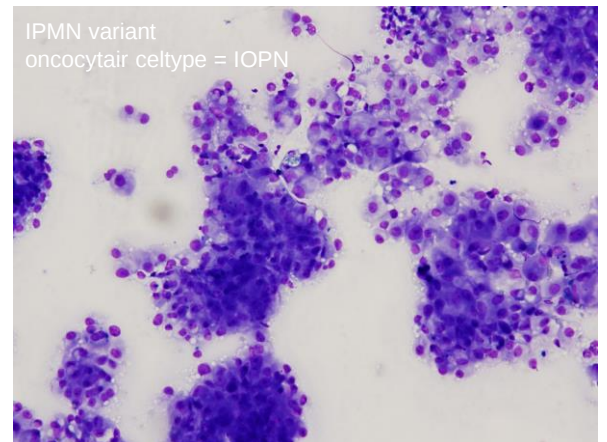


52

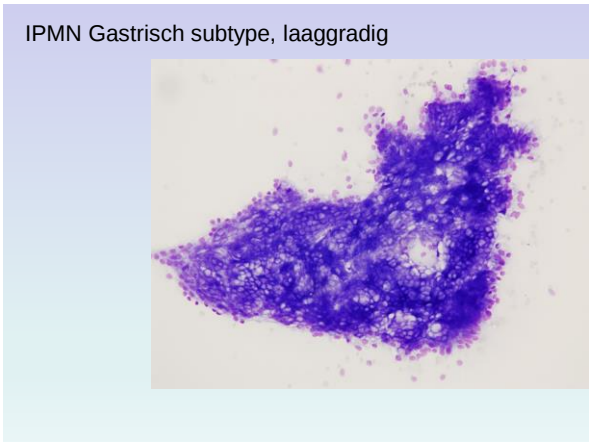
Cytologie Neoplastische Mucineuze Cyste



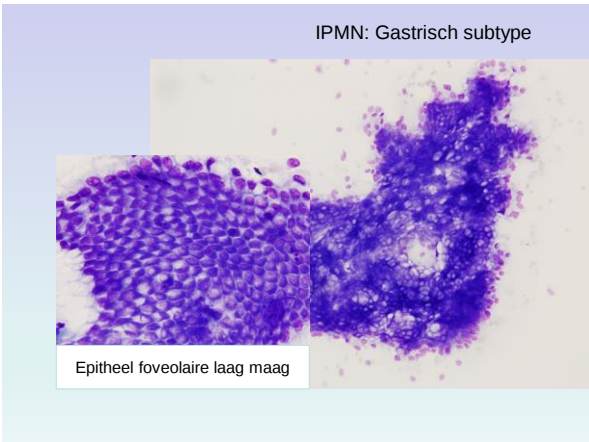
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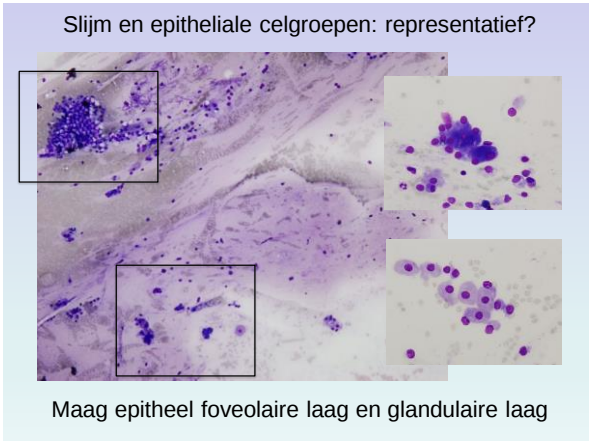
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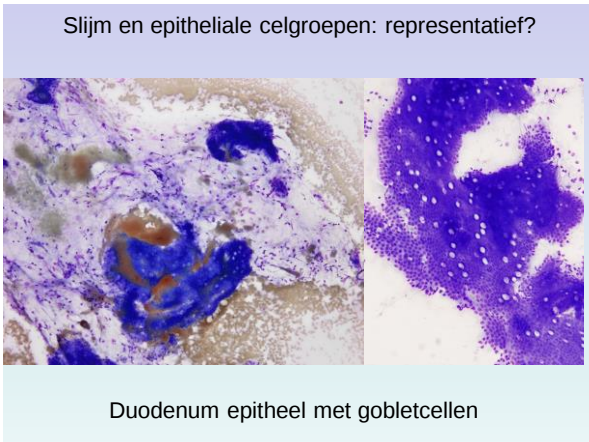
56



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DD pancreas cyste

Comparison of common pancreatic cystic neoplasms			
	Mucinous cystic neoplasm	IPMN	Serous cystadenoom
leeftijd	40-50 yr	63 yr	60-70 yr
gestacht	Female>>Male	Male>female	Female>male
locatie	Usually body/tail	Usually head	Body=tail/head
Connectivity to large ducts	Usually not	Always	Usually not
Cyste inhoud	Mucoid	Mucoid	Serous
Mucus oozing from ampulla	No	Often	No
Stroma	Ovarian-type	Collagen	Collagen
Multifocal disease	Very rare	20-30%	Very rare*
% of cystic lesions in the pancreas	6%	20%	10%

60

DD pancreas cyste

	Pseudocyste	Mucinous cystic neoplasm	IPMN	Serous cystadenoom
CEA	<200-300	>200-300	200-300	<200-300
AMYLASE	>800	<800	>800	<800
CYSTE INHOUD	dun	dik slijm	dik slijm	dun

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Dagelijkse praktijk cytologie

Meest voorkomende (solide) afwijkingen

- Ductaal adenocarcinoom
- Neuro endocriene tumor

Meer zeldzaam

Representatief of contaminatie van preexistent weefsel?

Cysteuze tumor

Benigne

Neoplastisch

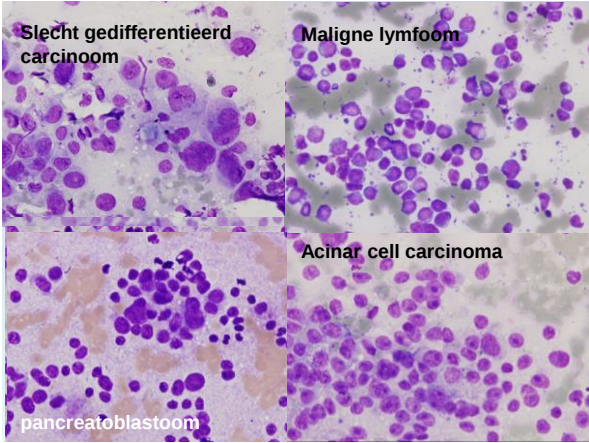
- Mucineuze cyste neoplasie
- Sereus cystadenomas

Chemisch laboratorium bepaling

stase

ing ductus

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thx!

Amsterdam UMC
Universitair Medisch Centrum

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