RADIO ANATOMIE DES ORGANES GENITO EXTERNES MASCULINS
Janvier 2015

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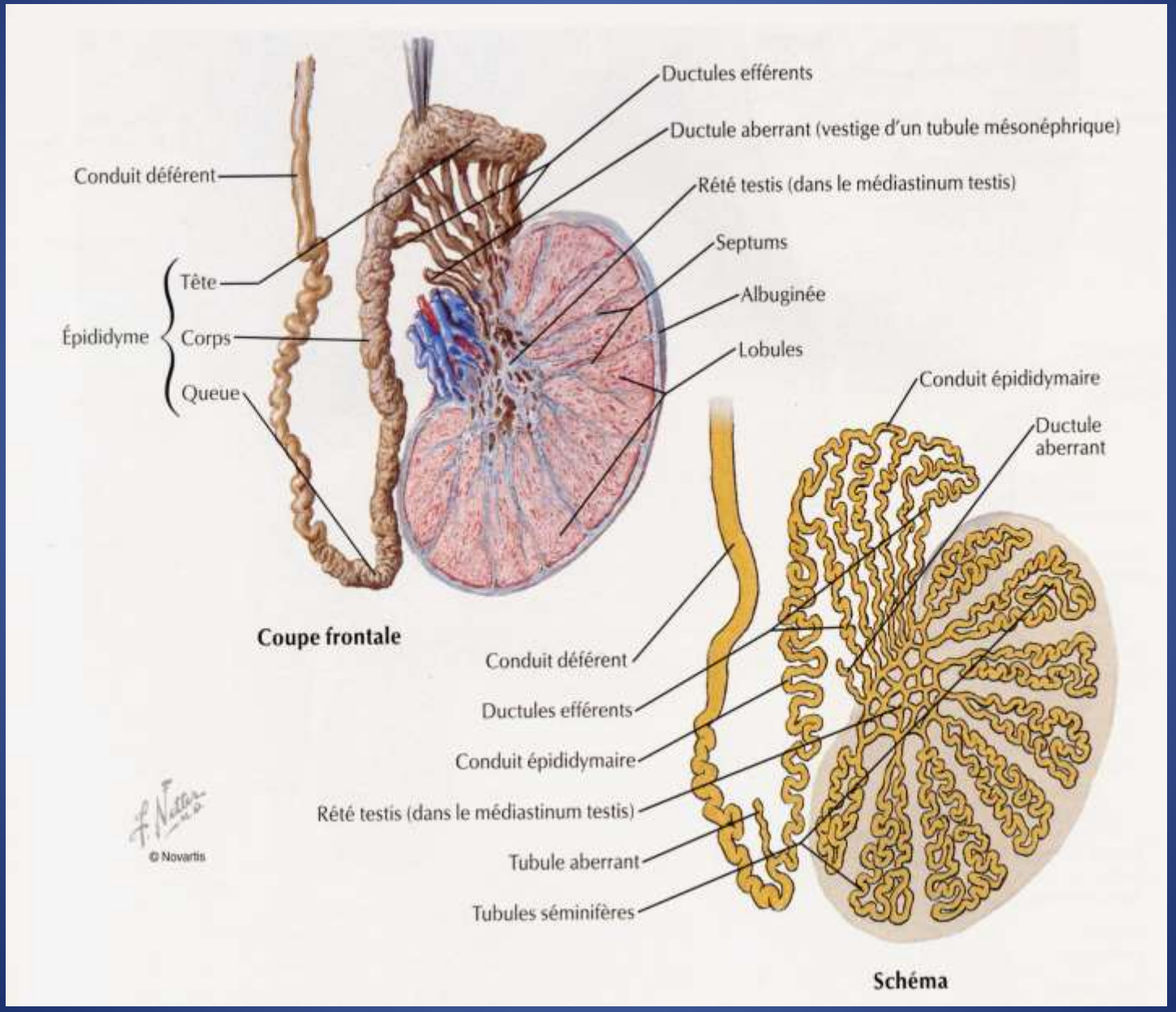
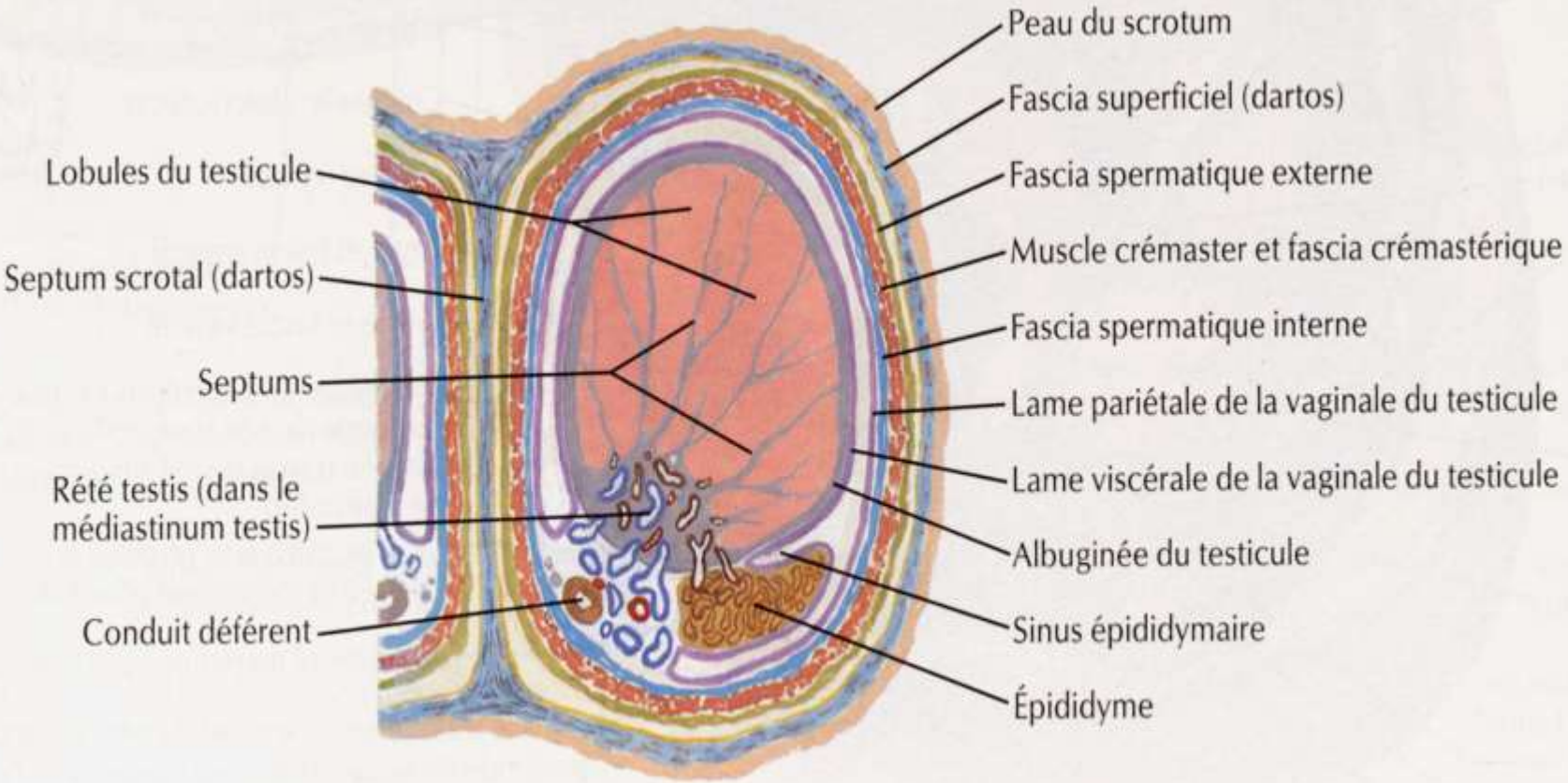
CHU Bicêtre

IMAGERIE DU SCROTUM
IMAGERIE DE LA VERGE

Anatomie

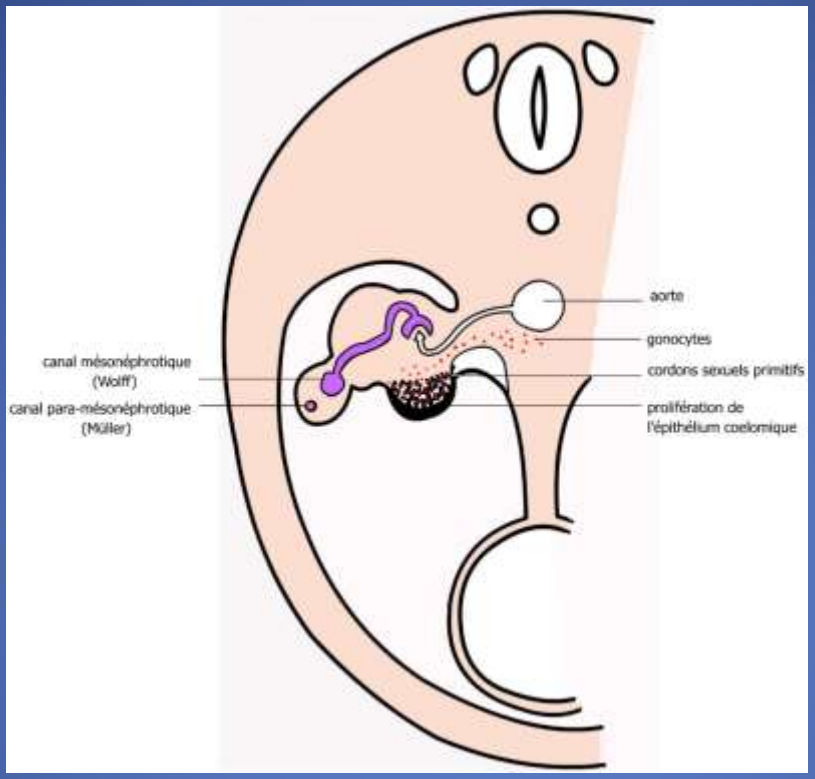

Ductules efférents
Ductule aberrant (vestige d'un tubule mésonéphrique)
Conduit déférent
Rété testis (dans le médiastinum testis)
Septums
Tête
Albuginée
Épididyme
Corps
Lobules
Queue
Conduit épididymaire
Ductule aberrant
Coupe frontale
Conduit déférent
Ductules efférents
Conduit épididymaire
Rété testis (dans le médiastinum testis)
Tubule aberrant
Tubules séminifères
© Novartis
Schéma

Anatomie

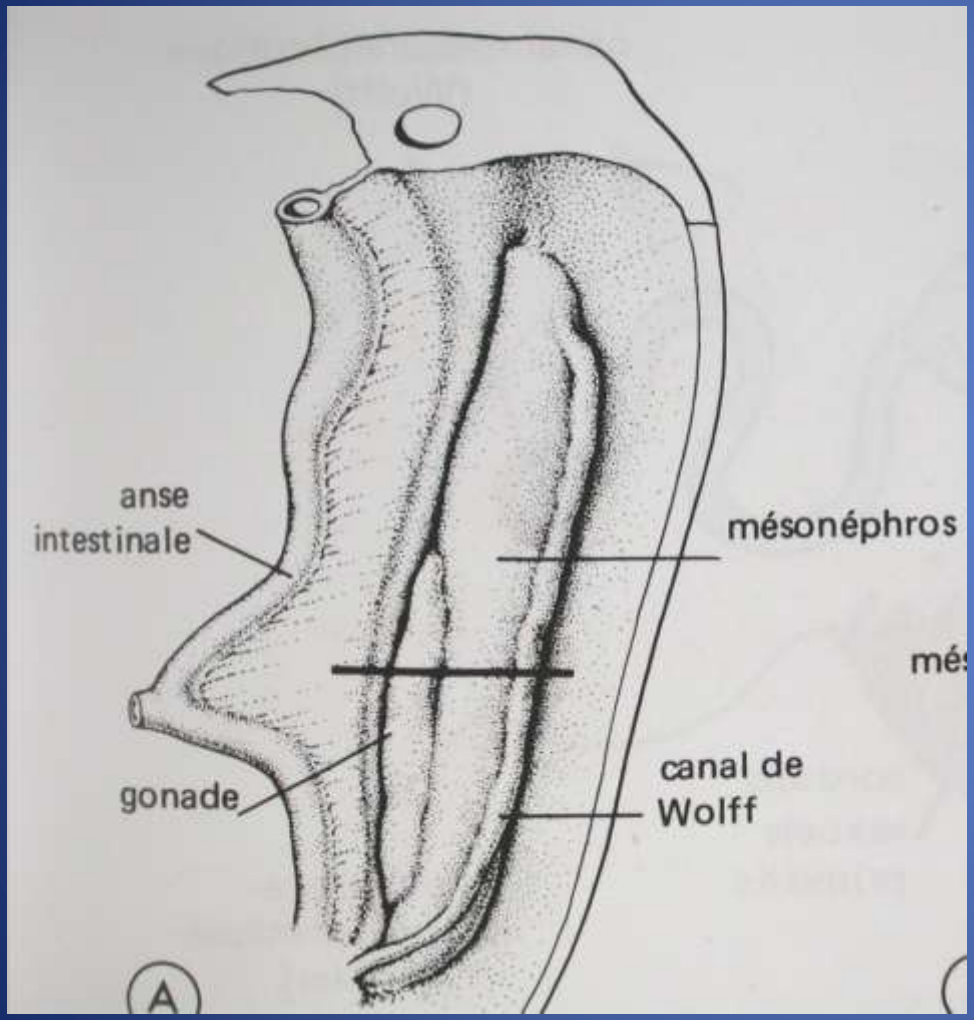


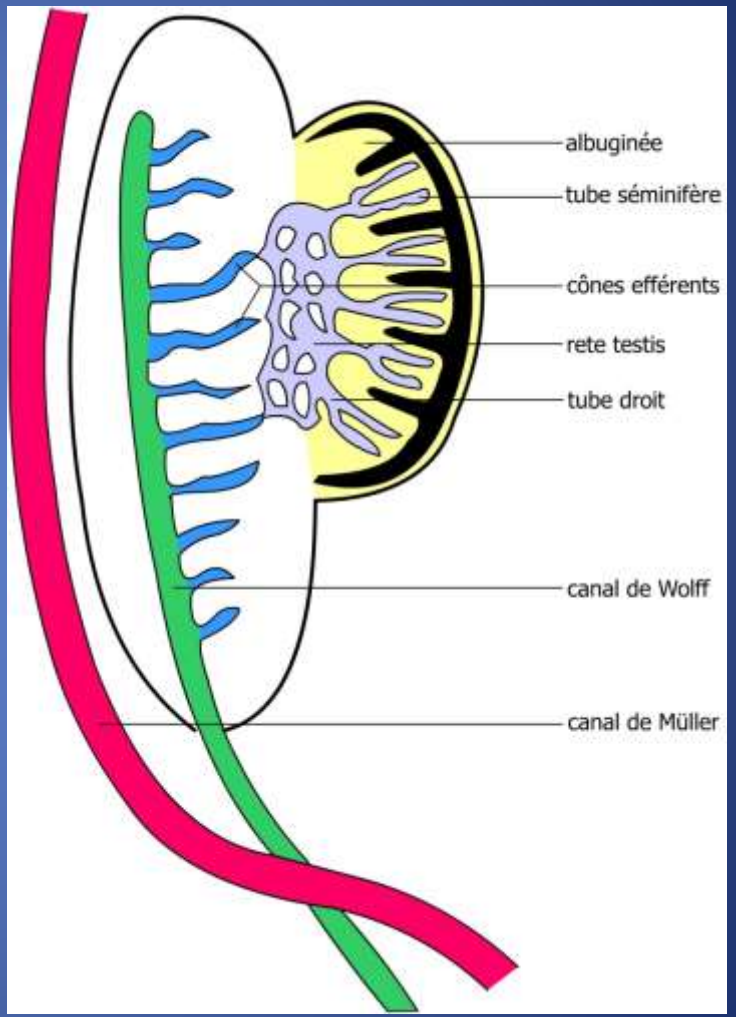
Coupe transversale du scrotum et du testicule

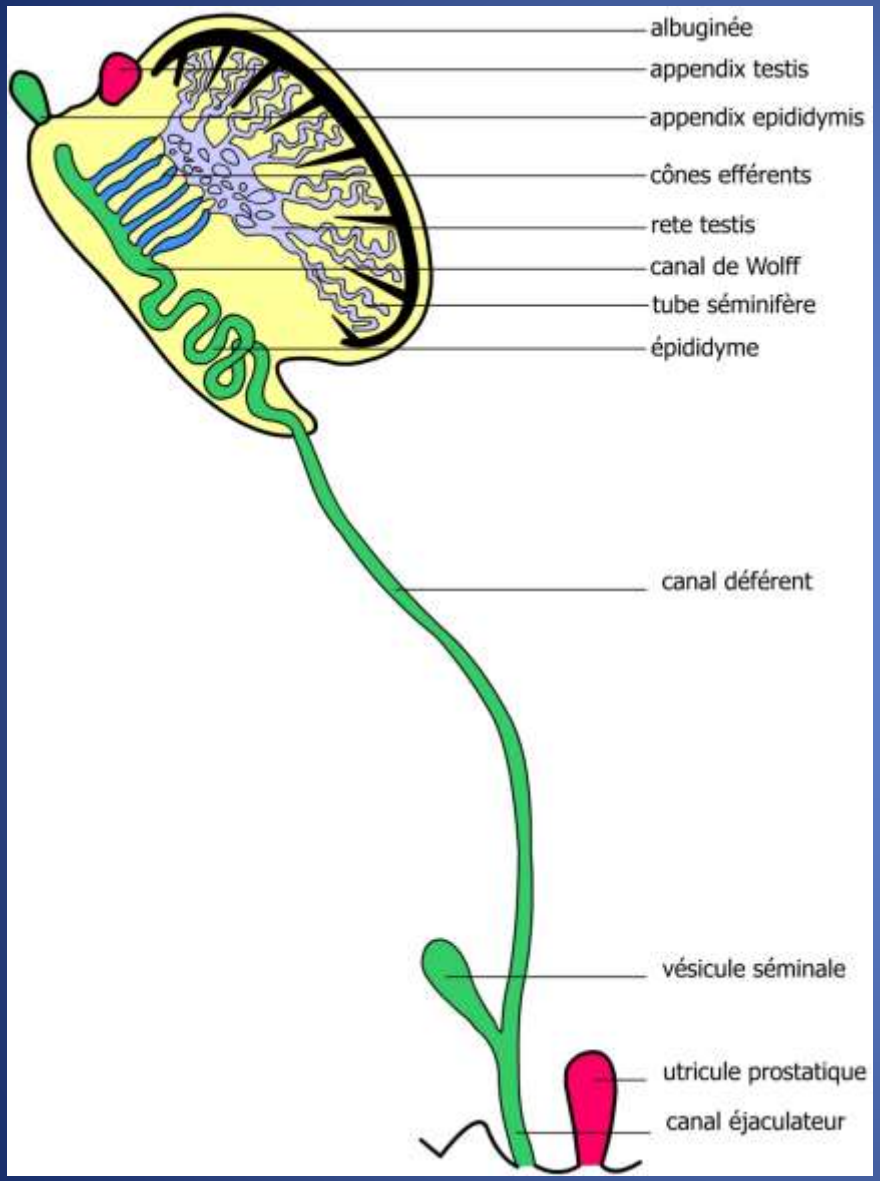
Crete uro genitale

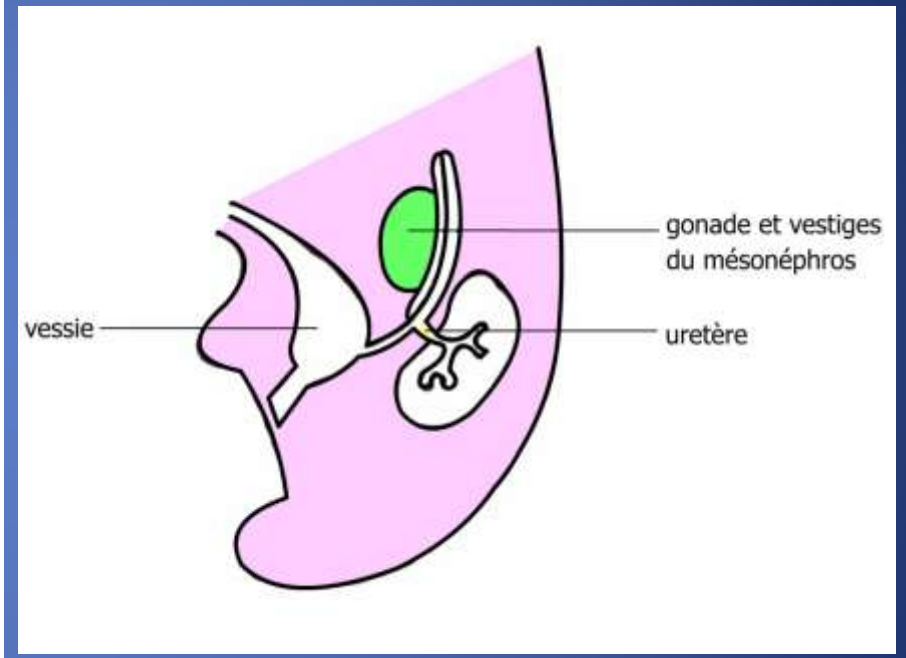


Ebauche gonadique : vient du mesonephros
Cellules germinales (30 jours)
Cellules stromales : sertoli>facteur inhibiteur des canaux de Muller
Leydig>testostérone>migration testiculaire

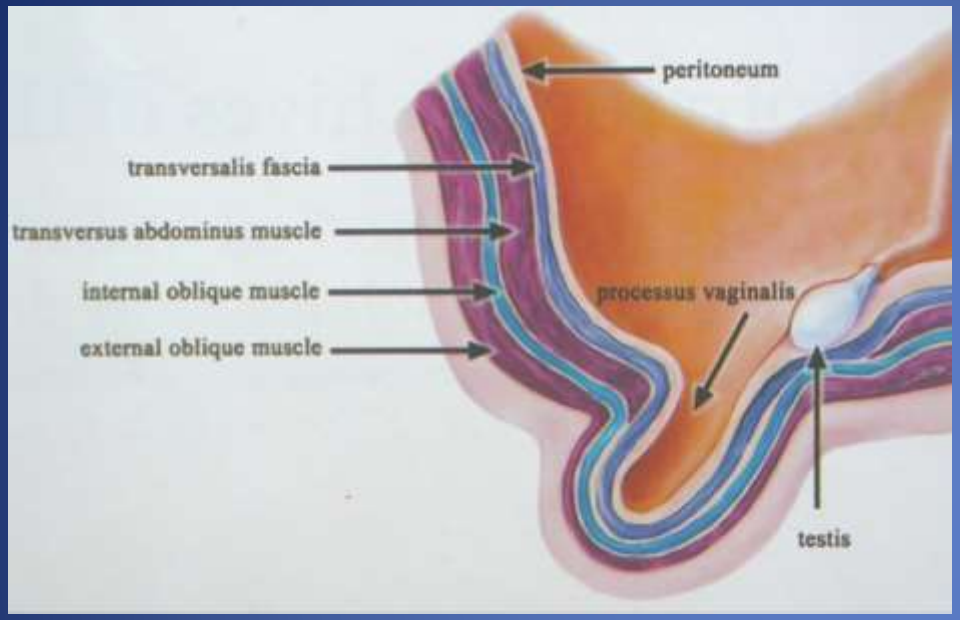

anse
intestinale
mésonéphros
gonade
canal de
Wolff
A

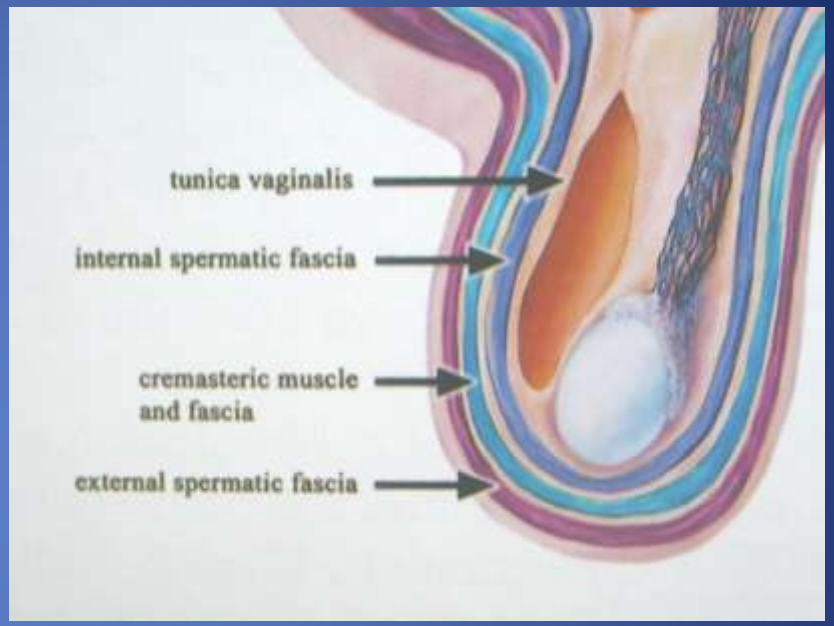

albuginée
tube séminifère
cônes efférents
rete testis
tube droit
canal de Wolff
canal de Müller


albuginée
appendix testis
appendix epididymis
cônes efférents
rete testis
canal de Wolff
tube séminifère
épididyme
canal déférent
vésicule séminale
utricule prostatique
canal éjaculateur


gonade et vestiges
du mésonéphros
vessie
uretère

embryologie





Ebauche gonadique : vient du mesonephros
Cellules germinales (30 jours)
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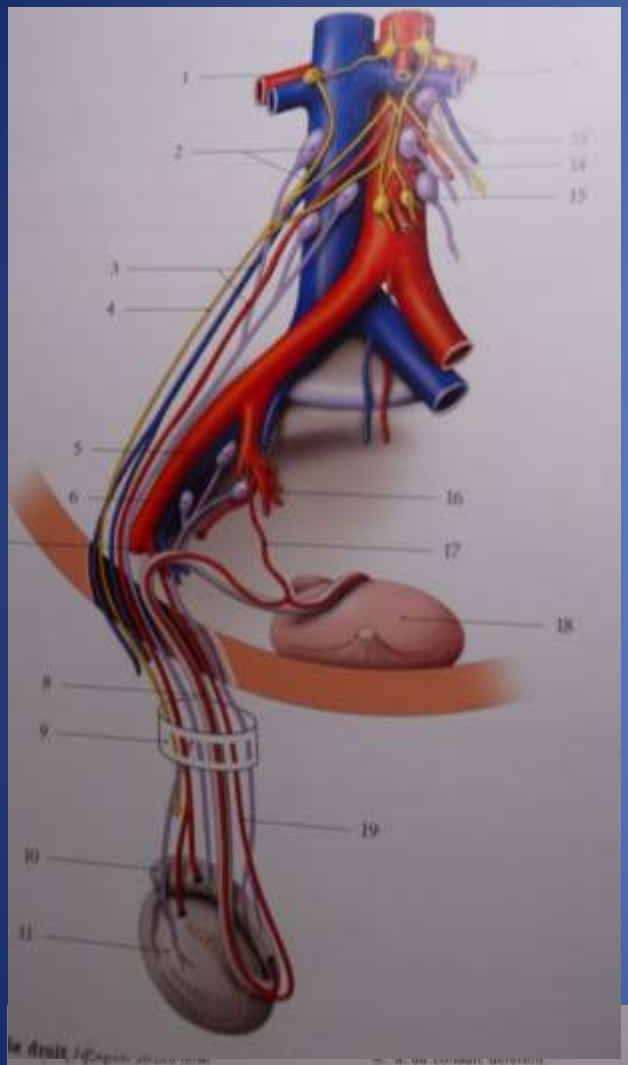
Leydig>testostérone>migration testiculaire

Vascularisation (2)



2. nœuds lymphatiques pré- et latéroaortiques
3. a. et v. testiculaires droites
4. plexus testiculaire
5. lymphonœud interiliaque
6. lymphonœud iliaque externe
7. a. épigastrique inf.
9. cordon spermatique
10. épididyme
11. testicule
12. a. et v. rénales gauches
13. lymphonœuds latéro- et pré-aortiques
14. a. et v. testiculaires gauches
15. ganglion mésentérique inf.
16. lymphonœuds iliaques internes
17. a. du conduit déférent
18. vessie
19. a. crémastérique

Aorte : **artere testiculaire droite +++**

Artere iliaque externe,

⟶ artere epigastrique inferieure,

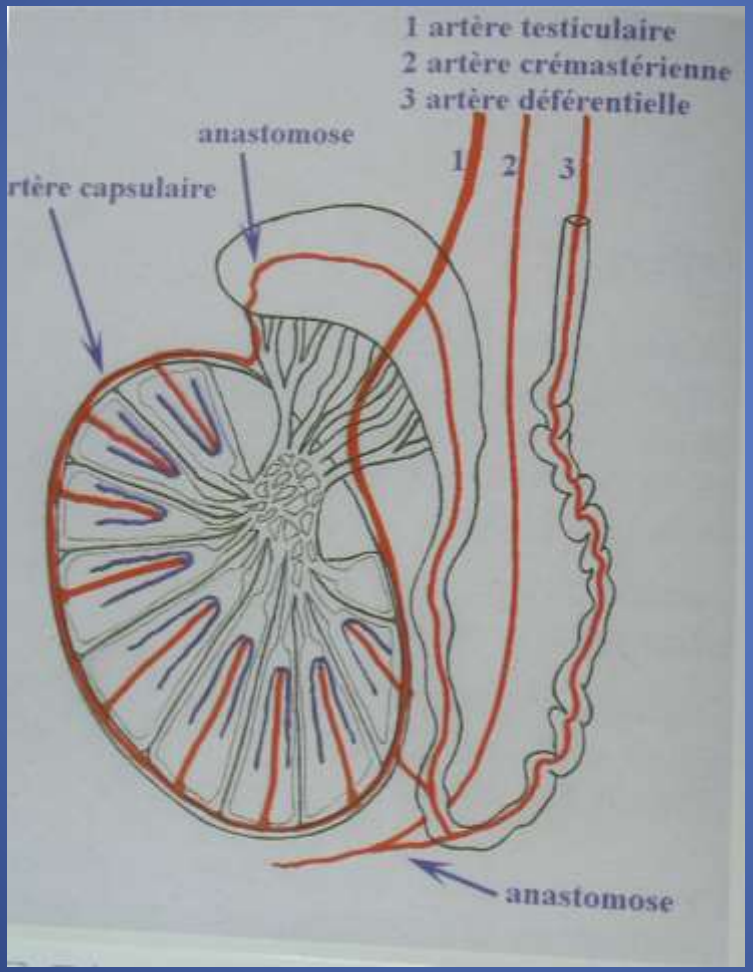
⟶ **artere crémasterique**

Artère iliaque iliaque interne

⟶ artere ombilicale

⟶ artere du conduit deferent

Vascularisation arterielle



Les variantes

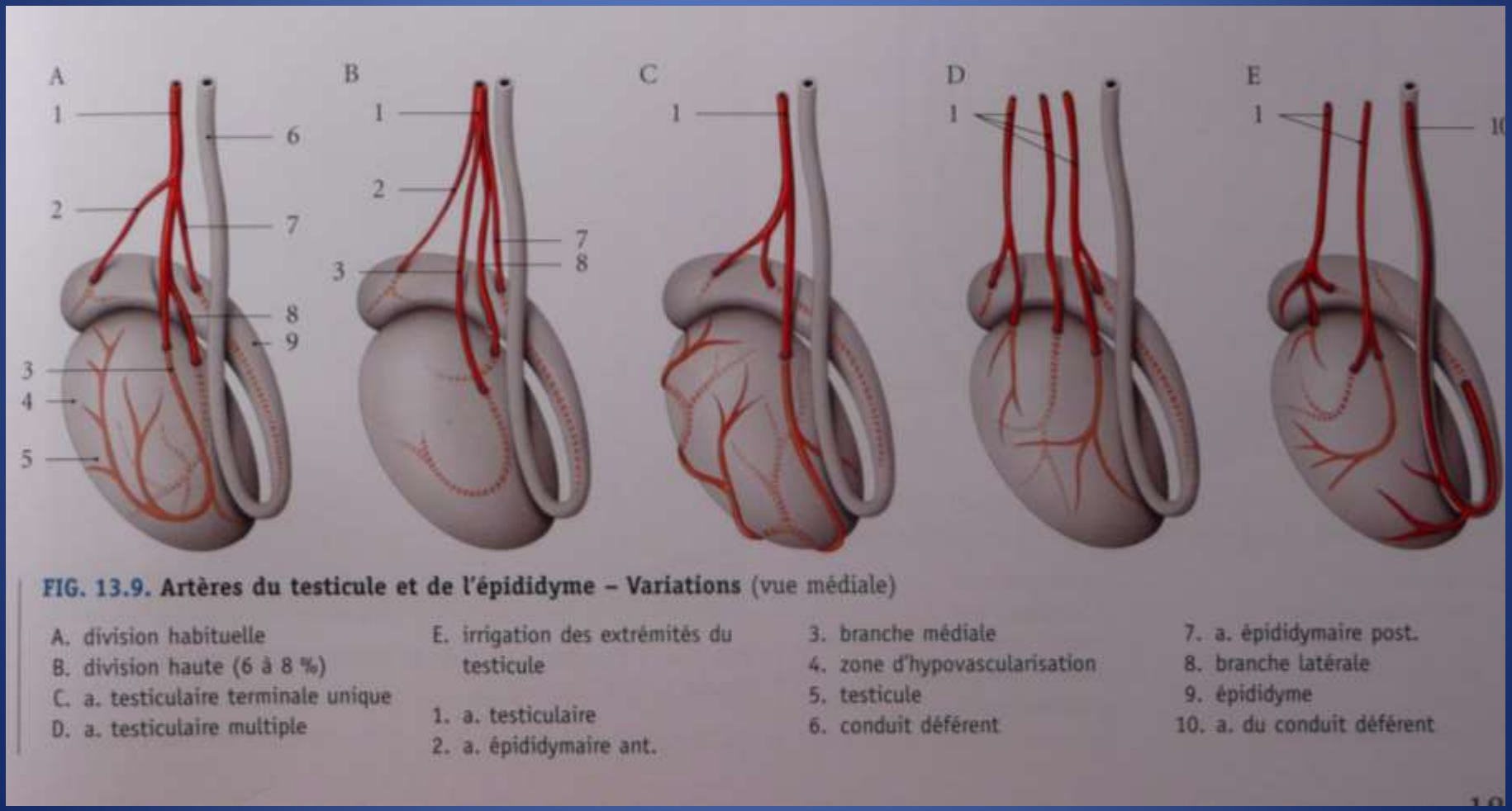
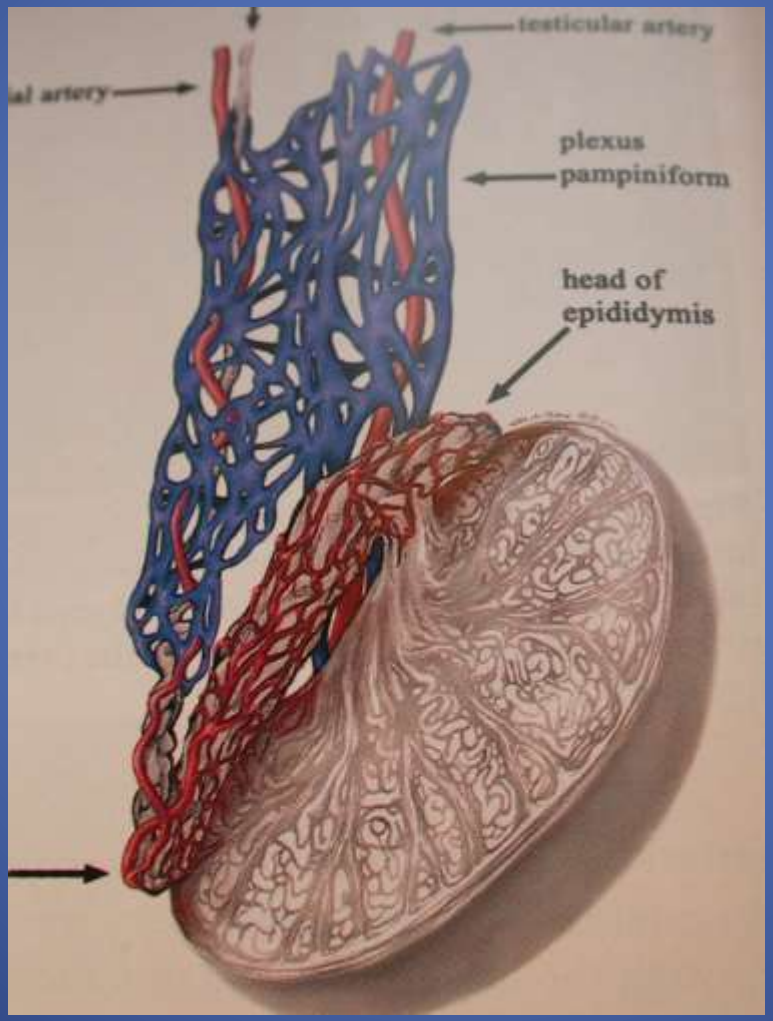


FIG. 13.9. Artères du testicule et de l'épididyme – Variations (vue médiale)

A. division habituelle
B. division haute (6 à 8 %)
C. a. testiculaire terminale unique
D. a. testiculaire multiple
E. irrigation des extrémités du testicule

1. a. testiculaire
2. a. épididymaire ant.
3. branche médiale
4. zone d'hypovascularisation
5. testicule
6. conduit déférent
7. a. épididymaire post.
8. branche latérale
9. épididyme
10. a. du conduit déférent

Vascularisation (2)



Les techniques d’imagerie

- (Deferentographie)
- Echo-Doppler +++
- IRM
- (TDM , urgence, polytraumatisé…)

(Déférentographie..en voie de disparition)

Echographie -Doppler: accueil du patient (en particulier si infertilité)

- Interrogatoire ciblé : atcd de cryptorchidie, masse, douleur, traumatisme, infections, paternité, profession,
- Spermogramme, hormonologie
- Information sur le déroulement de l'examen

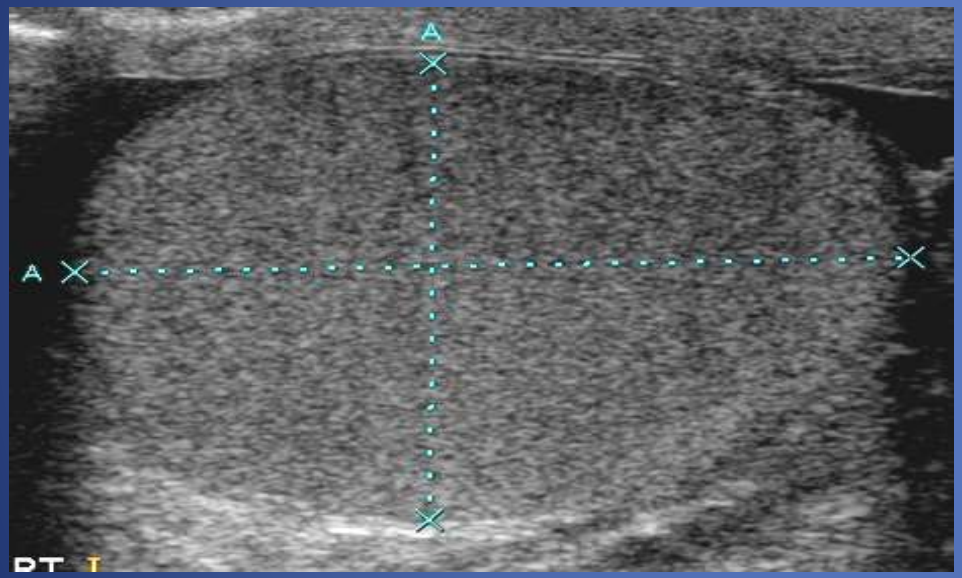
Technique

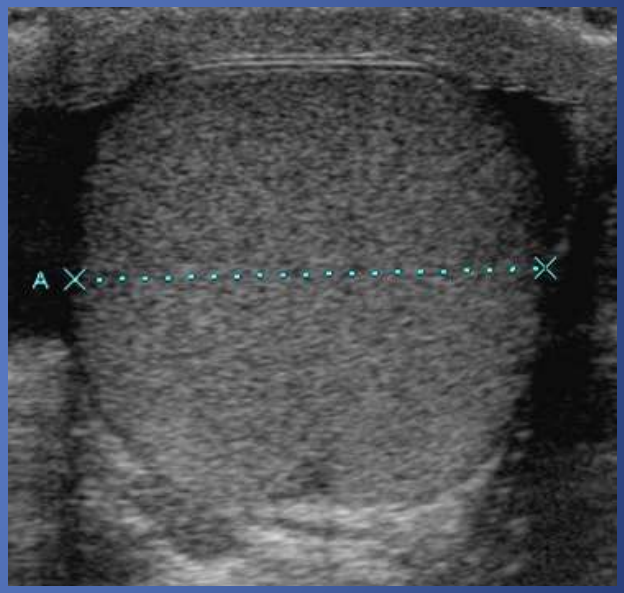
- Mesure du volume testiculaire :
  - Hauteur
  - Epaisseur sur les coupes longitudinales
  - Largeur sur les coupes axiales

- Volume estimé par approximation à une ellipsoïde : AxBxCx0,523
- Normal si >15 mL chez adulte sain pubère

Testicules : Résultats normaux

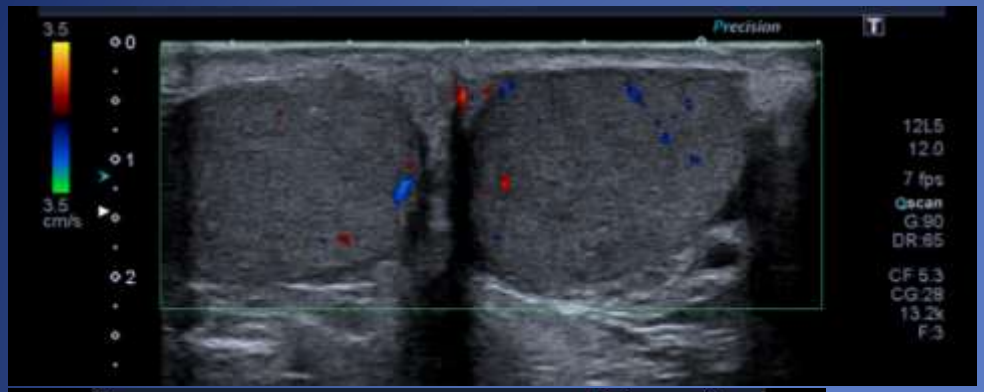
- vol>15 mL, épaisseur > 20mm, homogène,

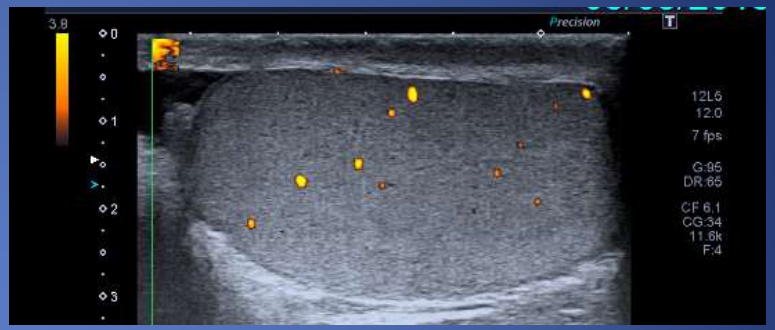


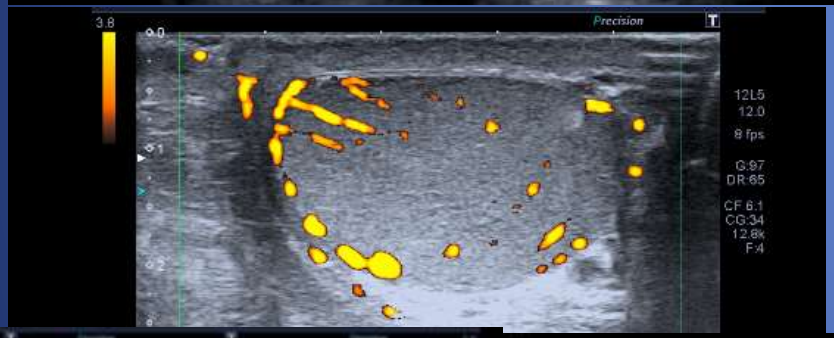


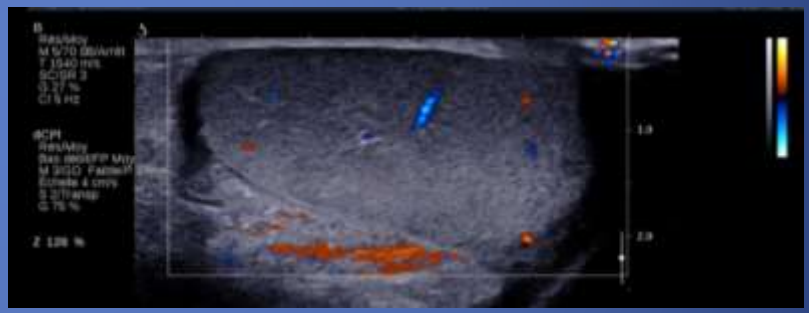

100% F
Résolution d'orig
1
diffT1
32
G:
DR
1
0
1
2
3

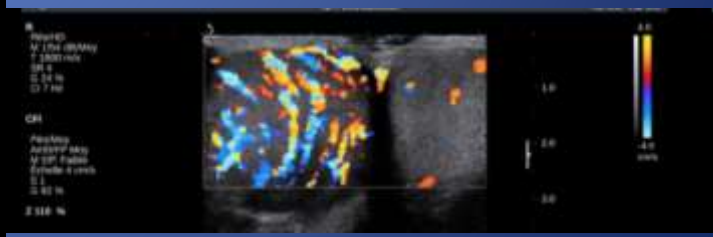
La vascularisation normale…dépend de la sensibilité du Doppler….et du réglage : au minimum 2cm/s si possible



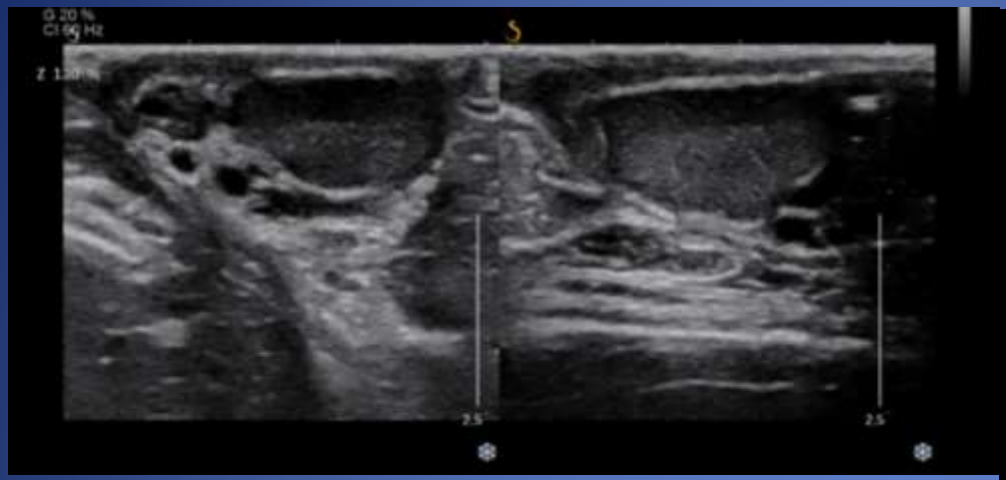


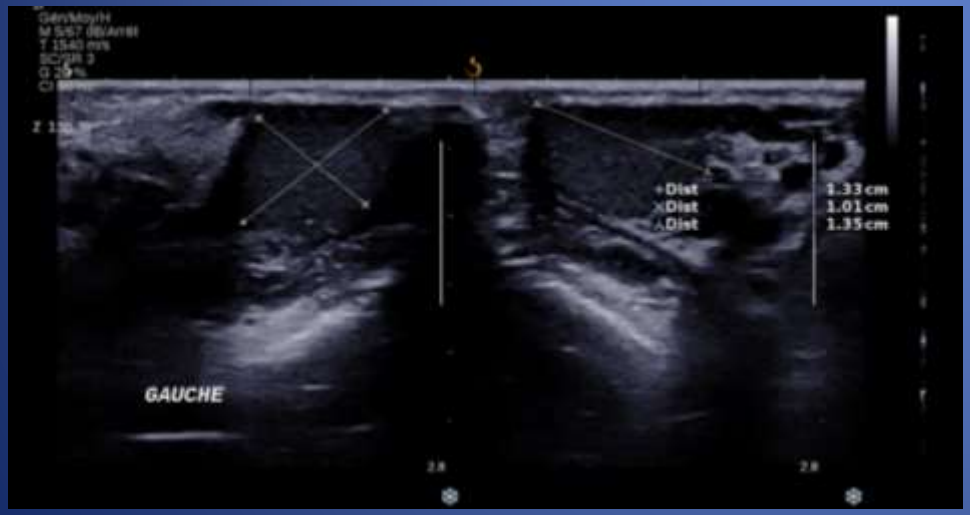


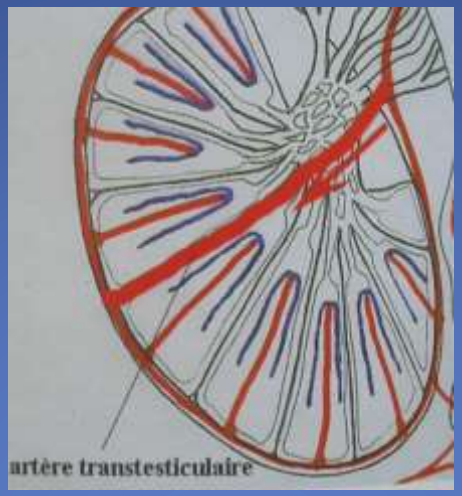


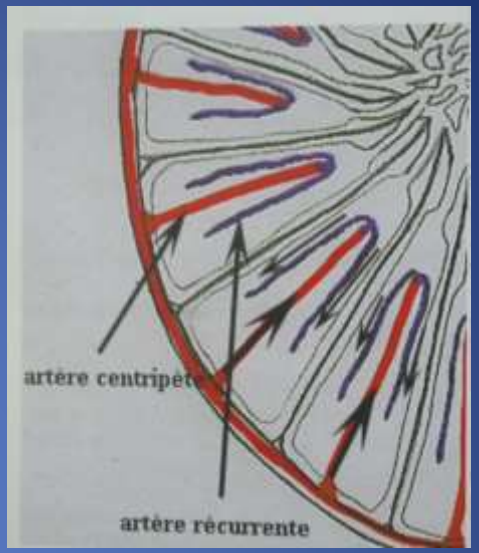


Les erreurs

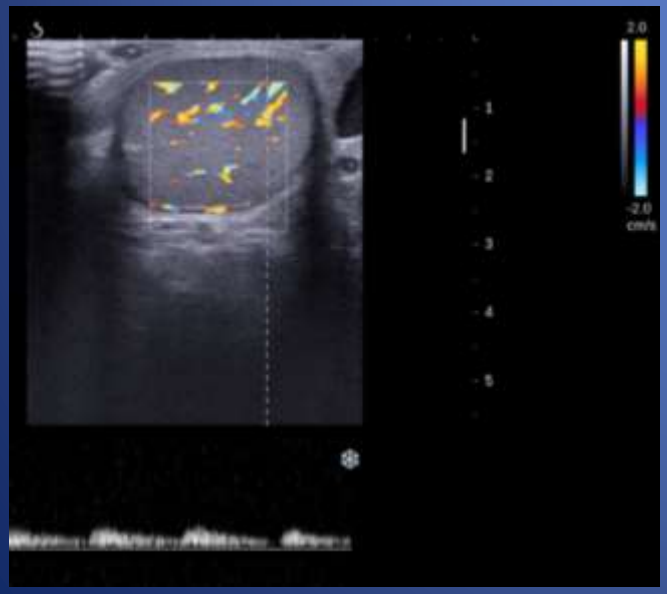


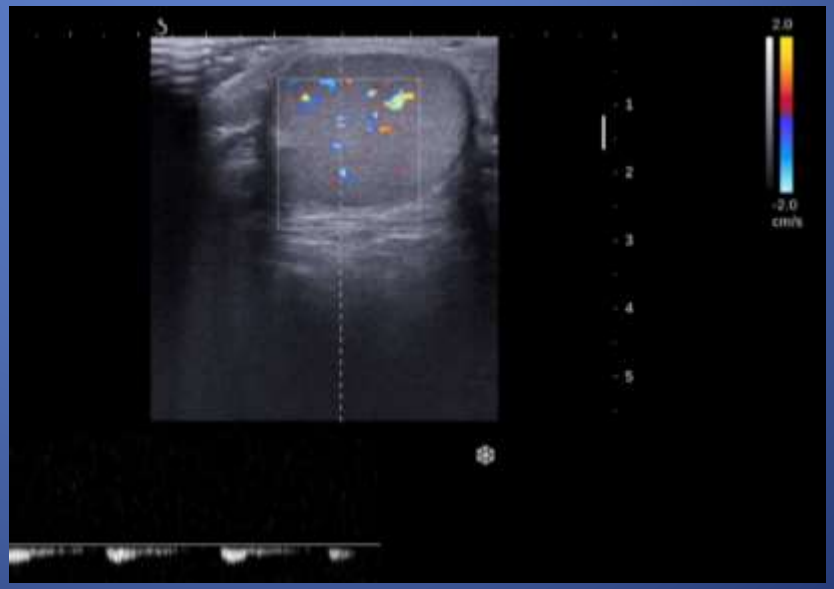




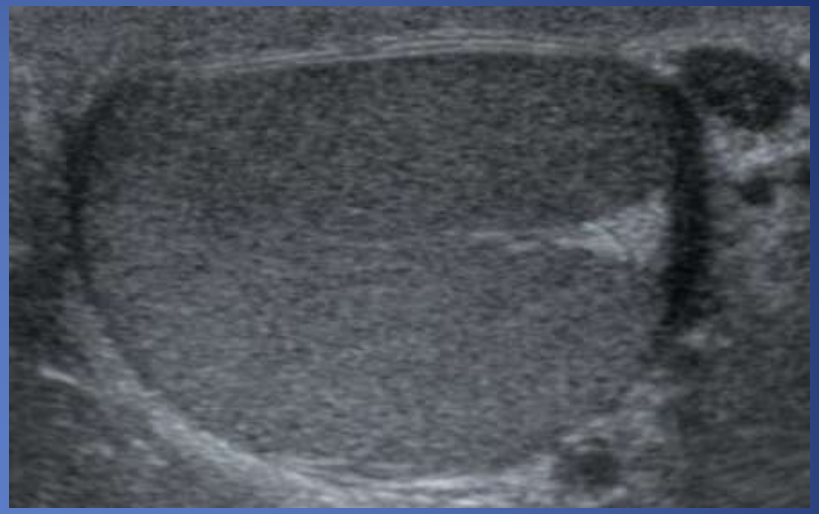


Veine trans testiculaire (pas de fracture!)

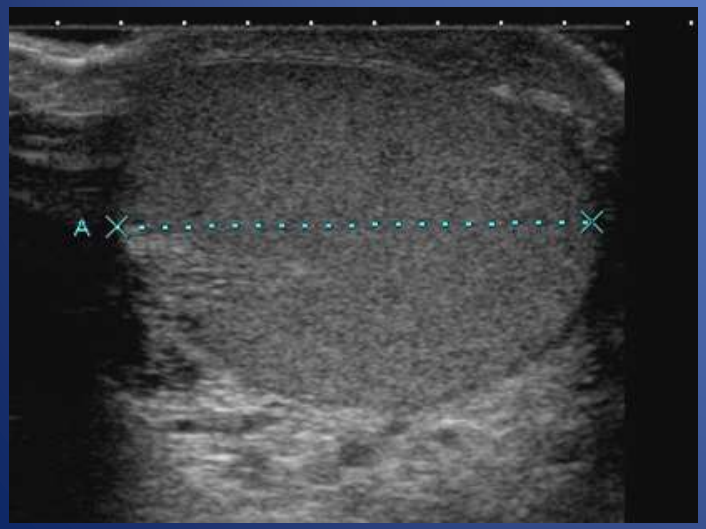


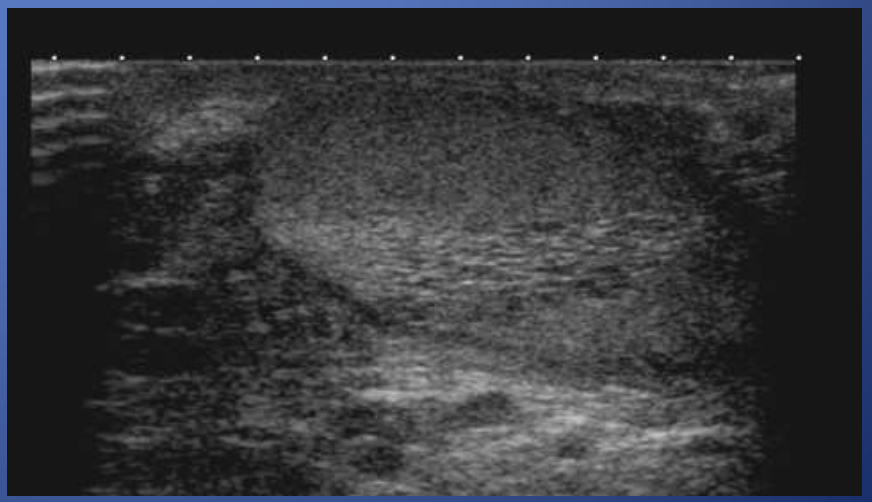


Hile normal

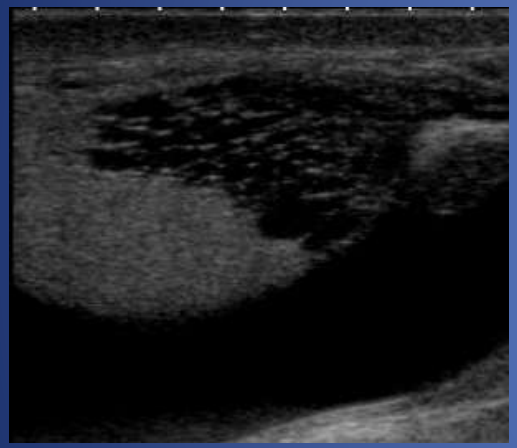


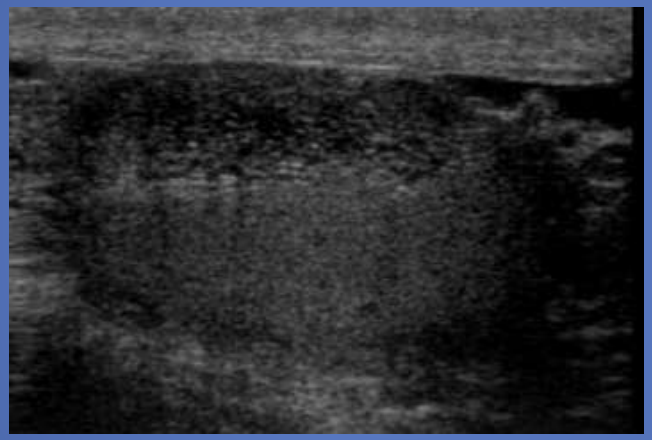
Dilatation modérée du rete testis, normale chez le sujet âgé

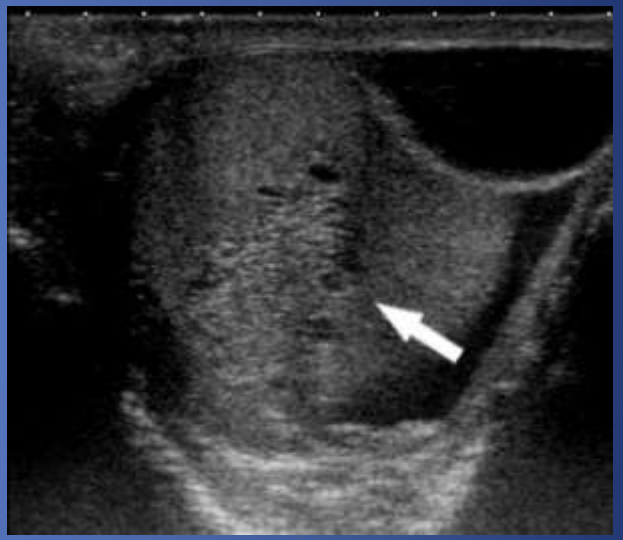




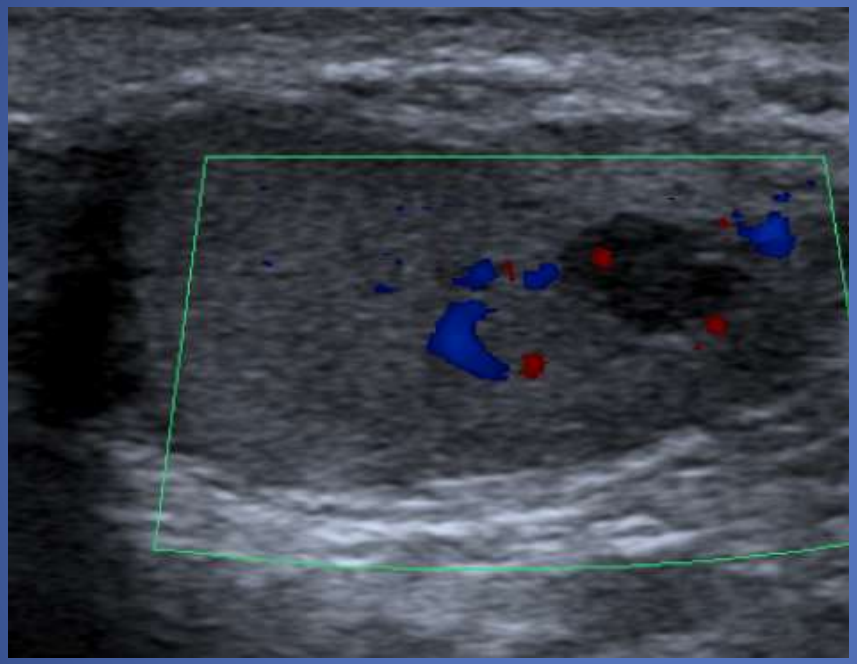
Ectasie du rete testis : occlusion





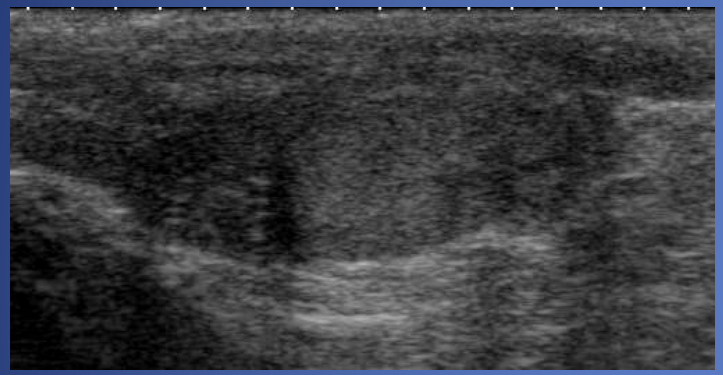


Nodule juxta hilaire: ce n’est pas kystique !

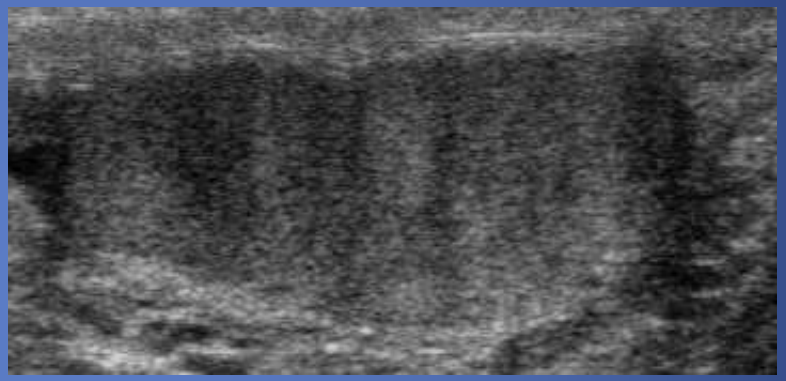


Stale sur 2 ans : probable tumeur a cellules de Leydig

Les anomalies de la pulpe testiculaire

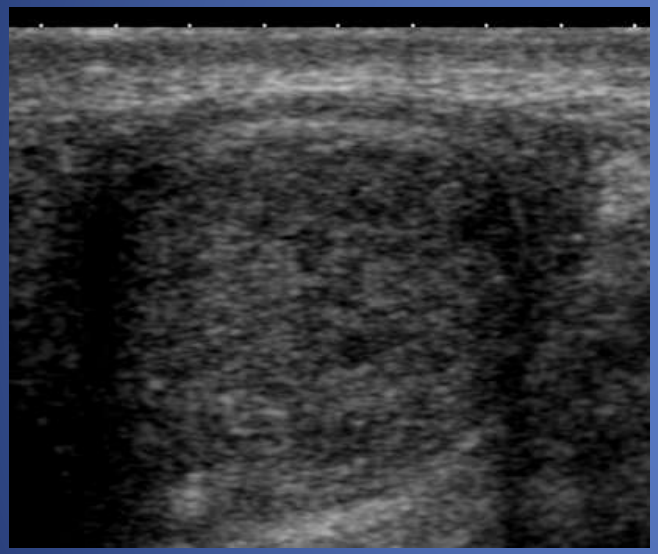


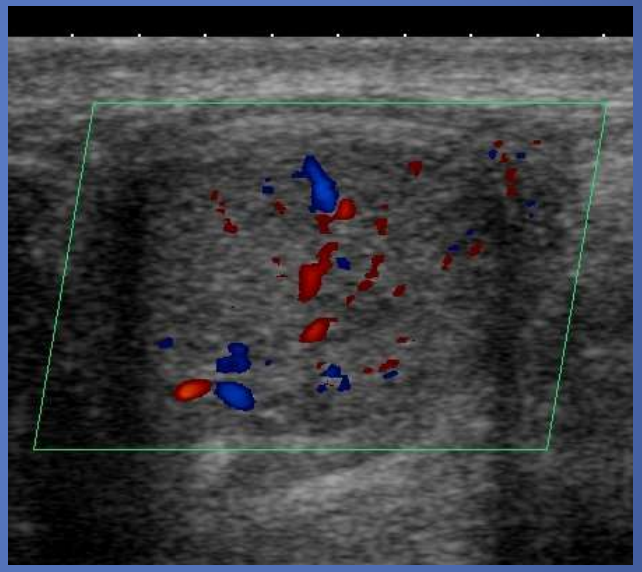
Atrophie (ici post torsion) meconnue



Post cure de cryptorchidie
(aspect de fibrose cicatriceille)

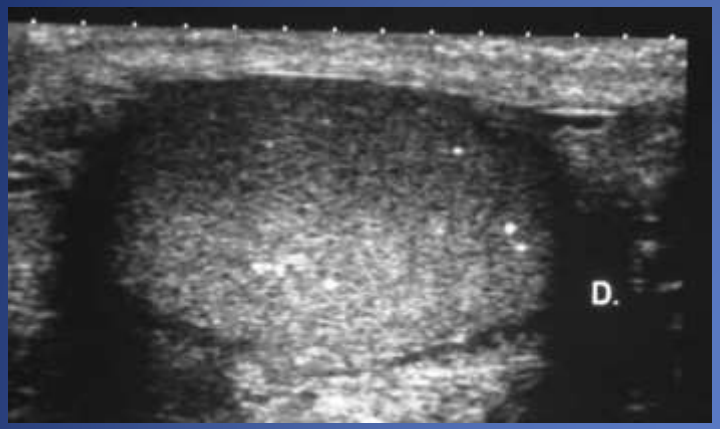
Aspect multimicronodulaire : rechercher une anomalie caryotypique (Klinefelter)





microlithiases

1



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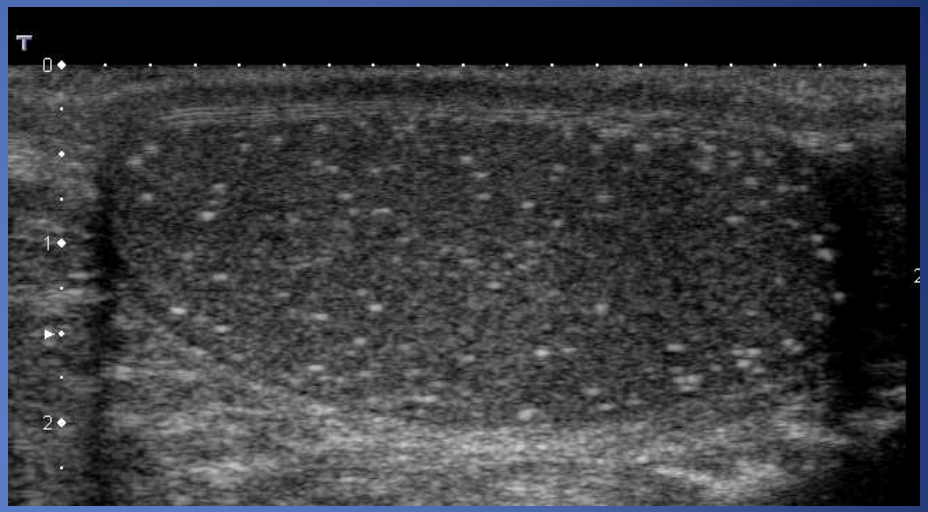
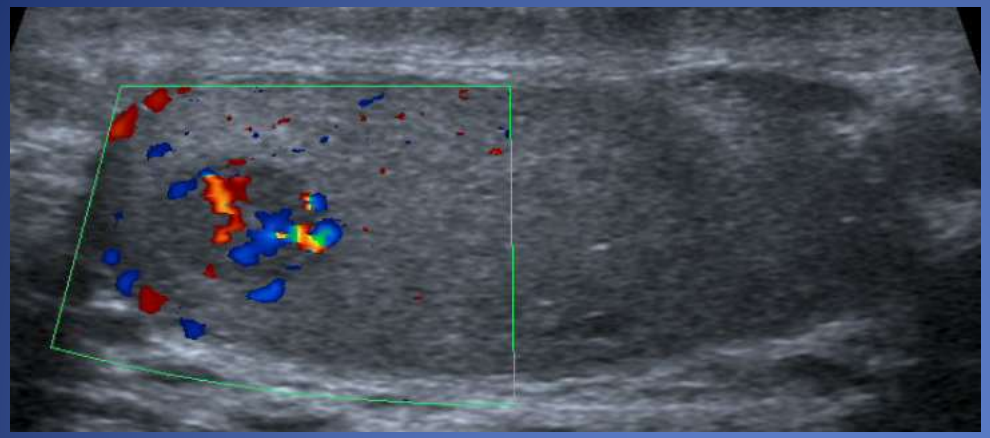
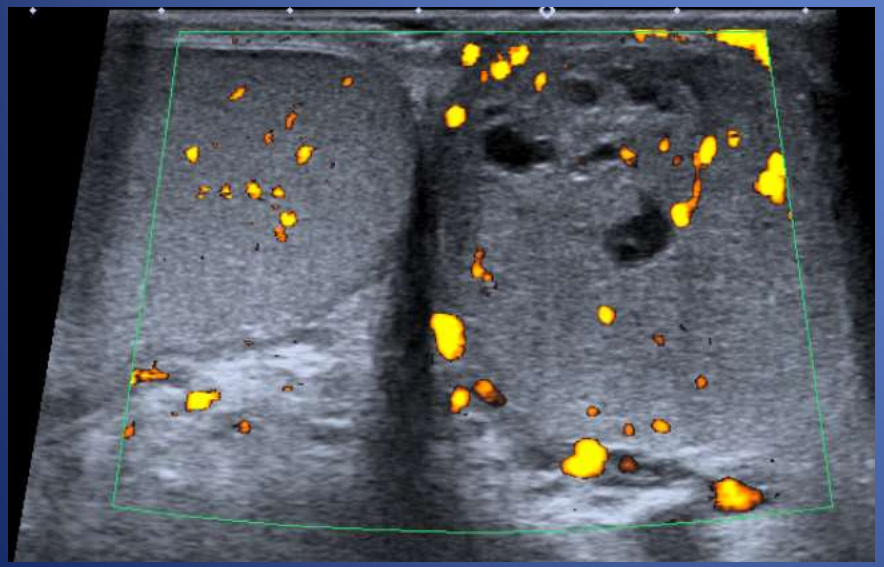
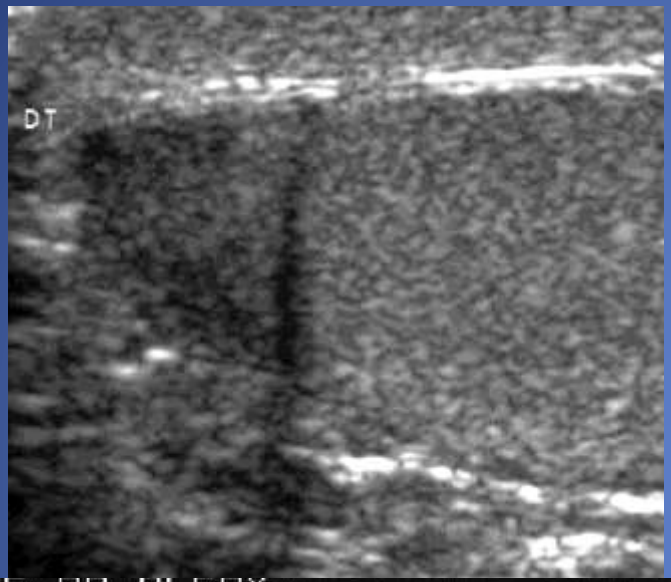


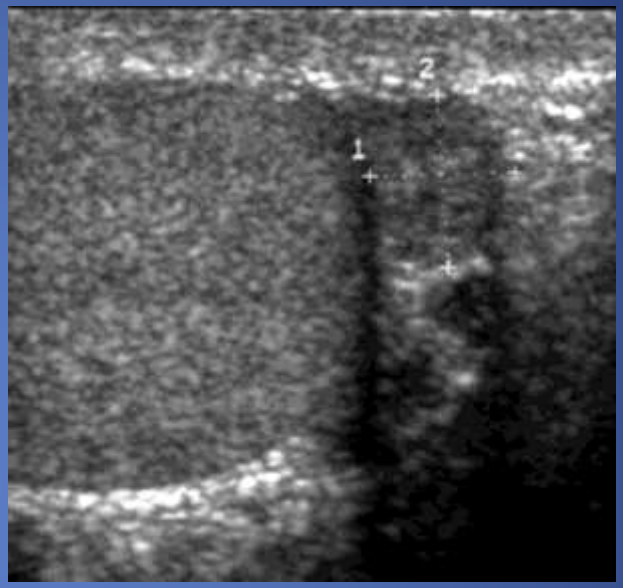
Tumeurs du testicule

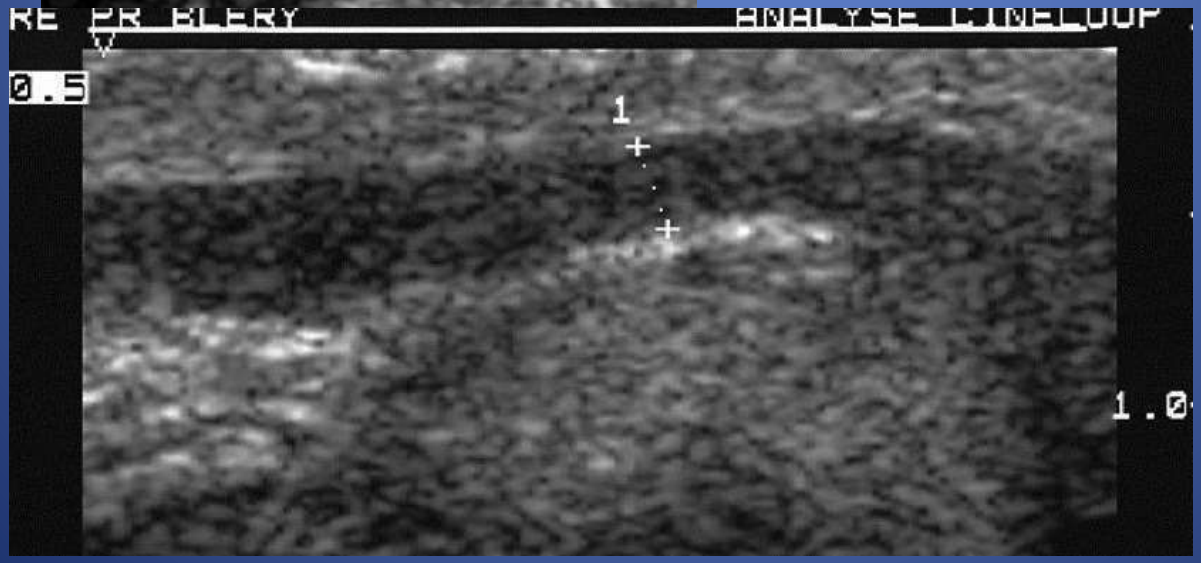




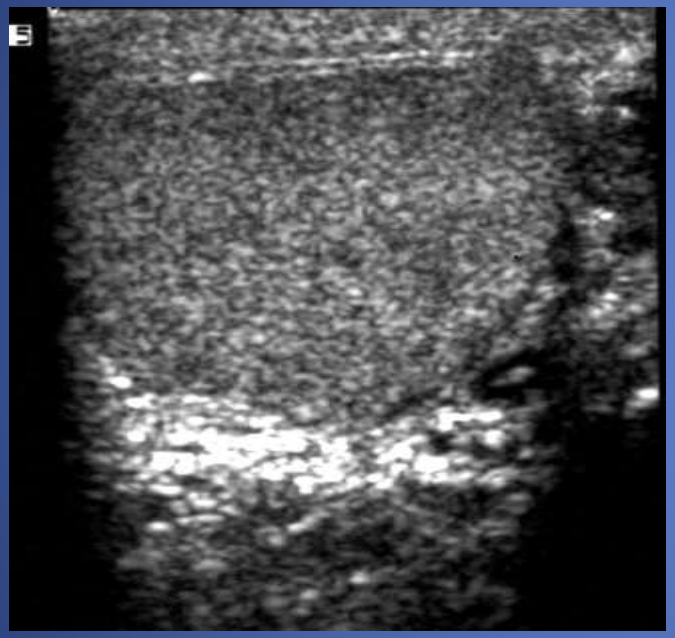
Epididymes : Appareils « ancienne génération »



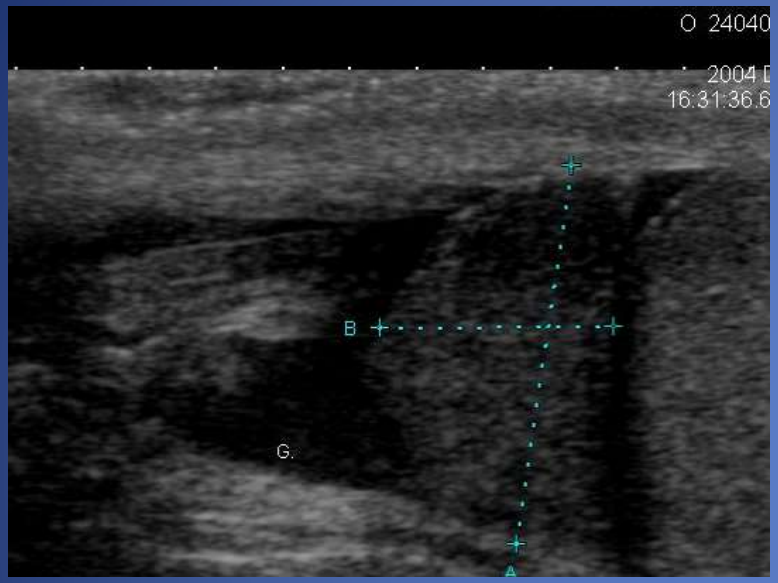


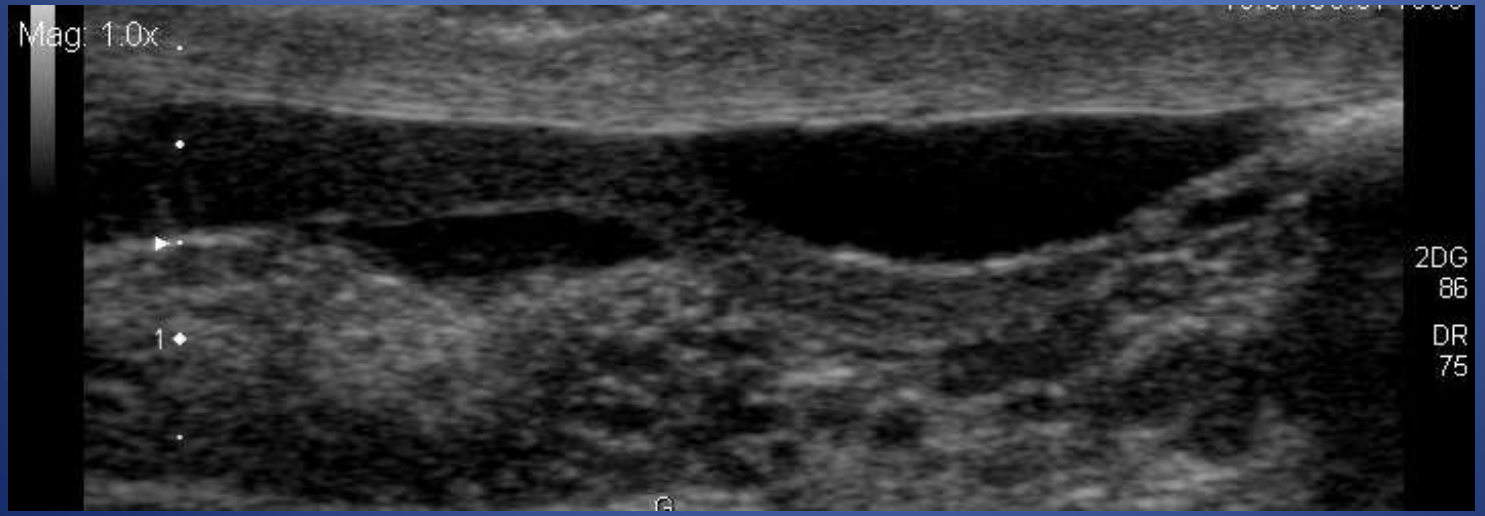


Quelle est cette structure tubulée?

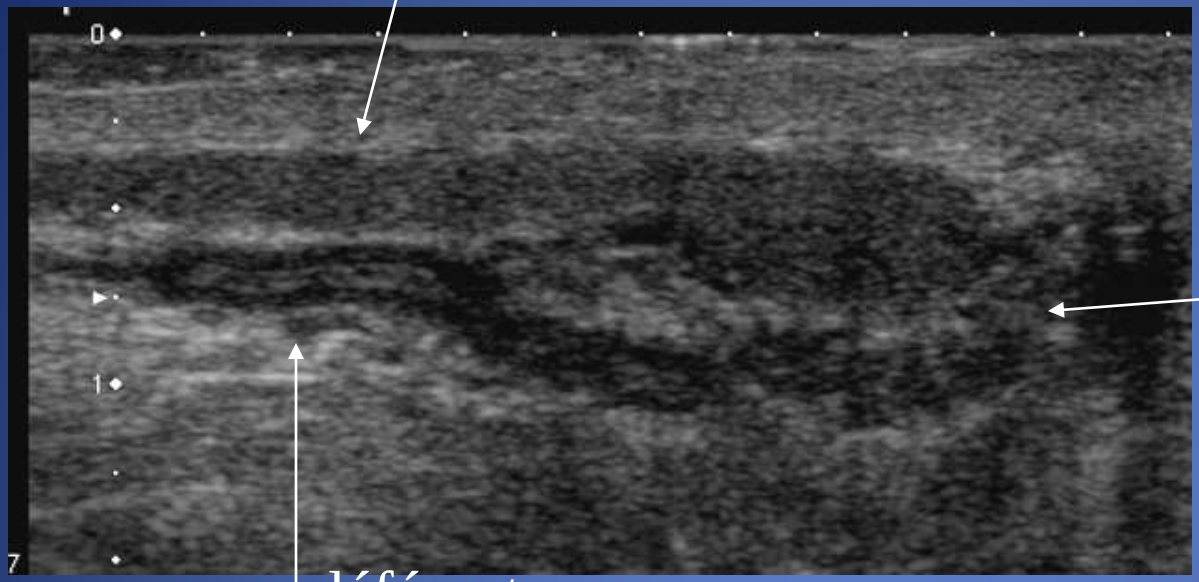


Sonde 8-18Mhz



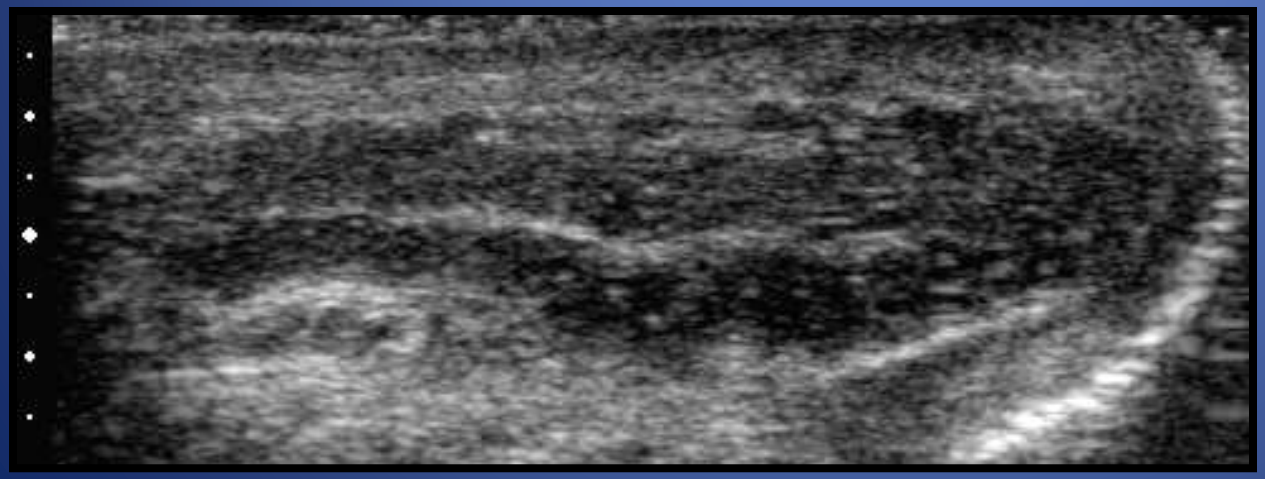


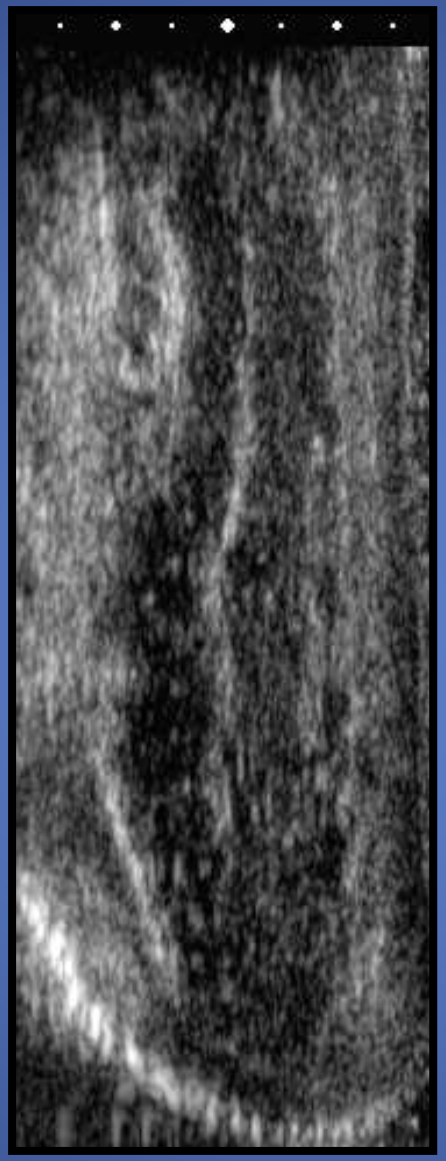
Corps épididyme

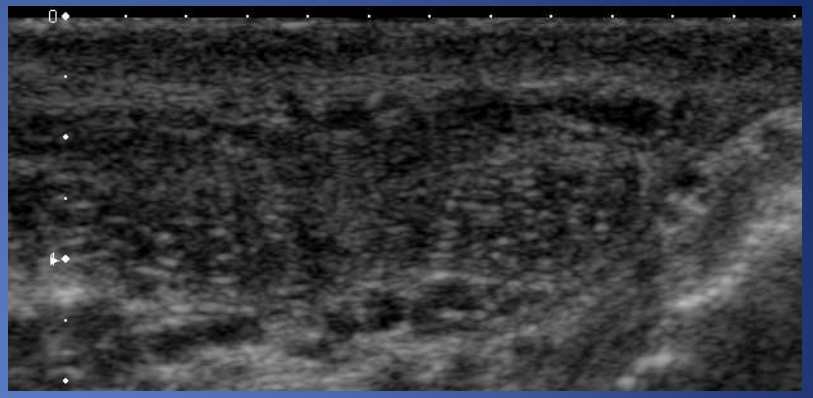


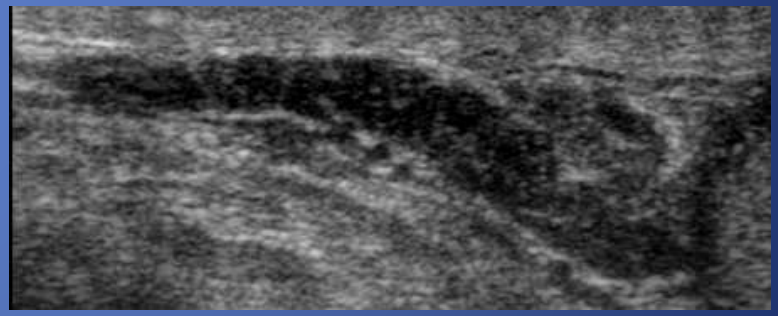
Anse épididymo-déférentielle

déférent

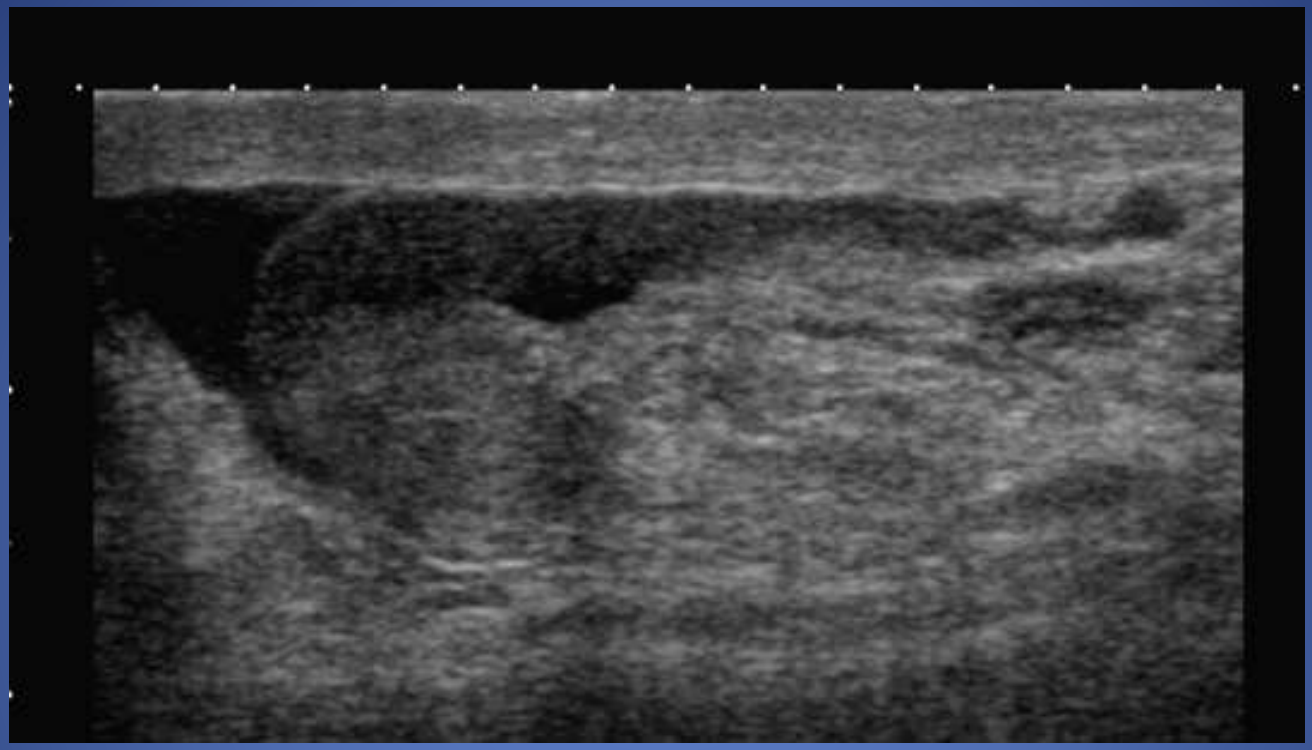






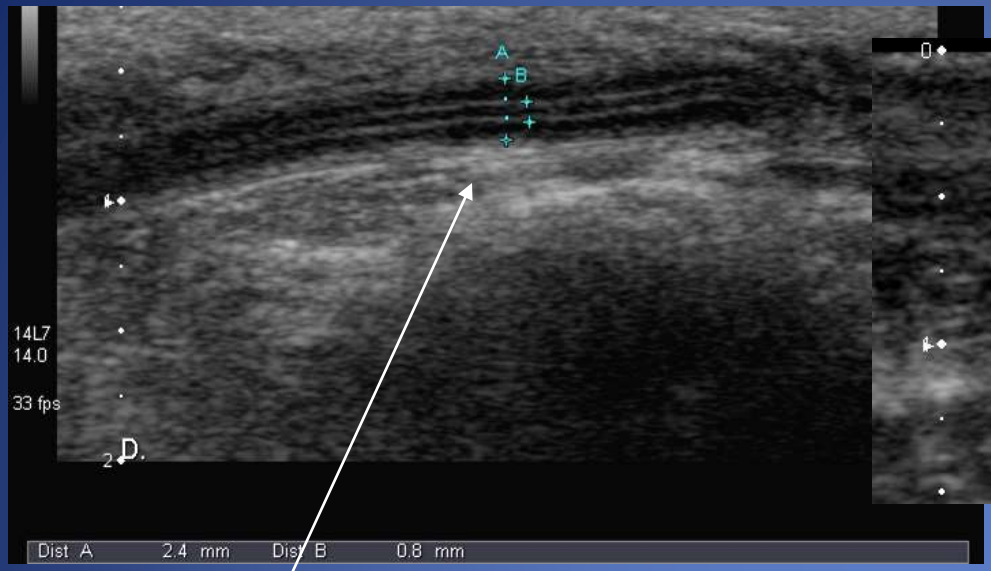


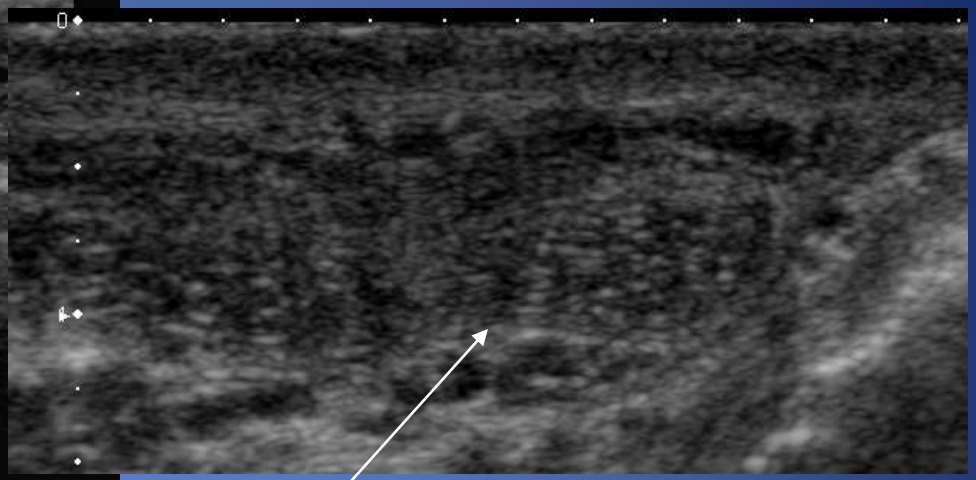
Épididyme-aspects normaux et variantes



Jonction tête-corps normale : la tête apparaît plus hyperéchogène que le corps

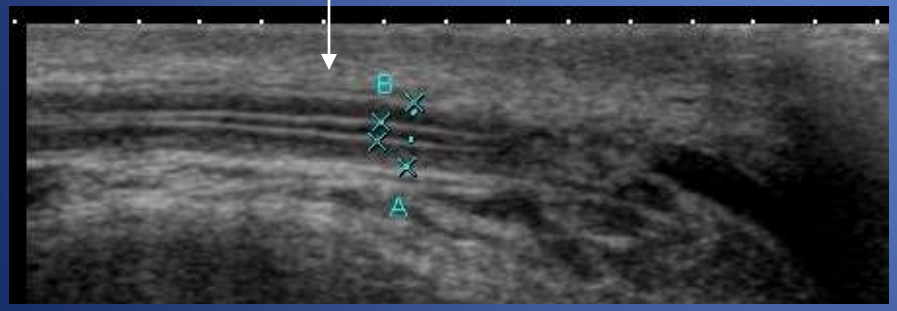
Déférents normaux





Partie initiale sinueuse

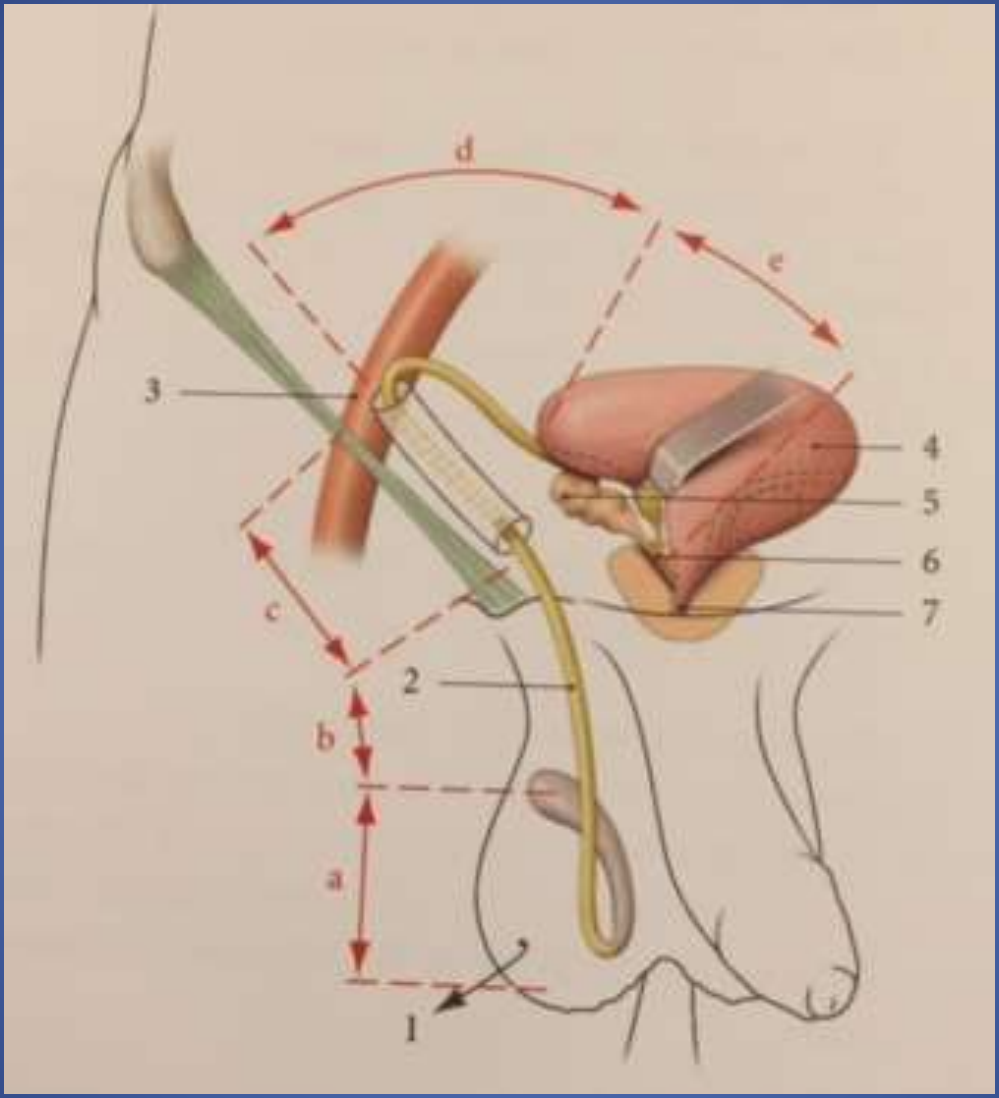
Partie distale, linéaire



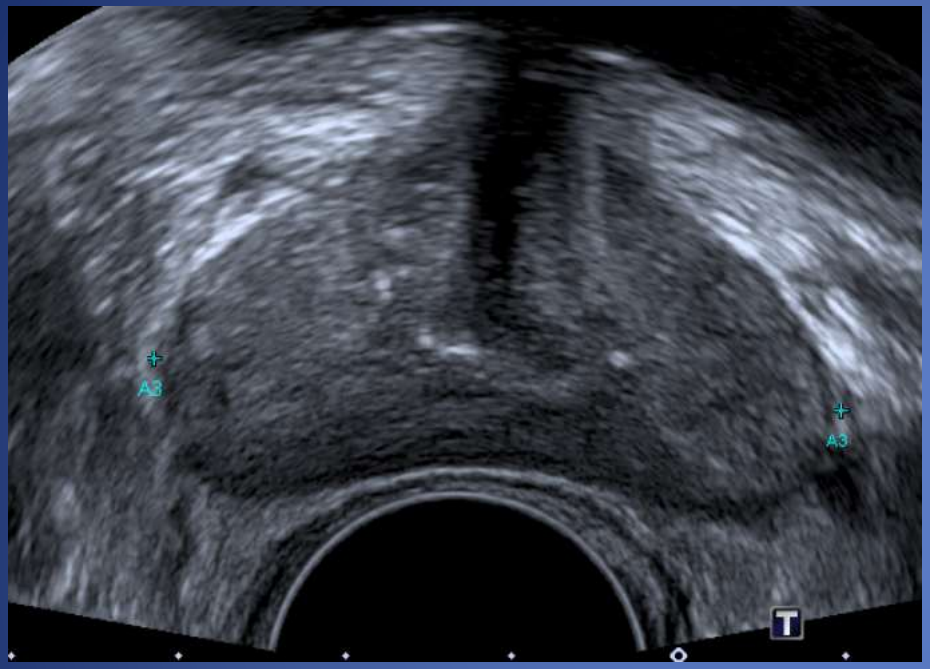
La lumière interne n’est pas toujours visible

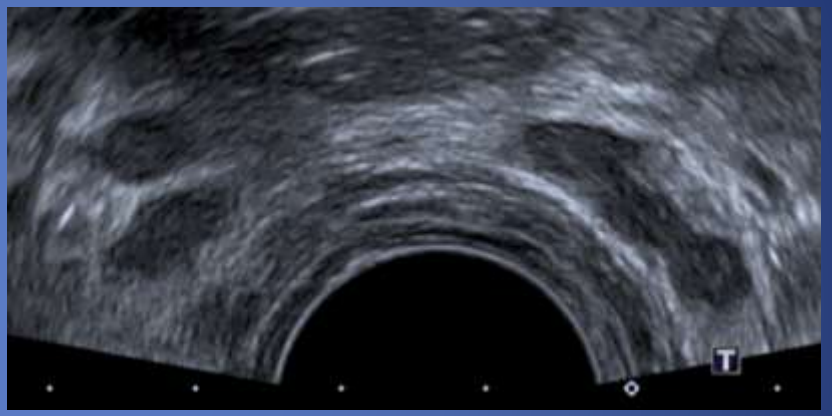

0
1
2
3
MI
1.3
18L7
diffT18.0
32 fps
G:94
DR:70
1 cm

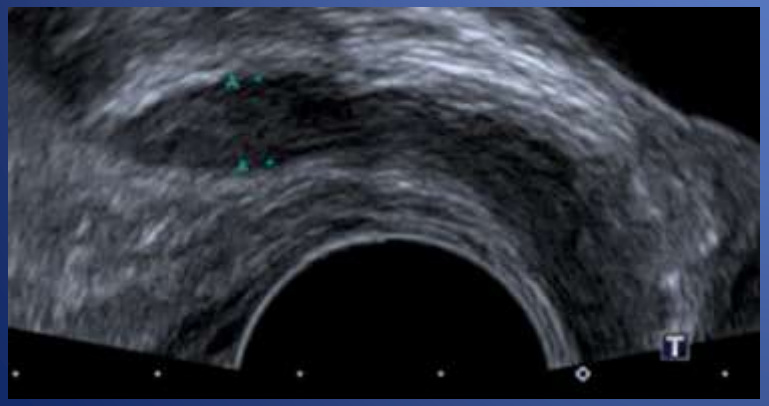
Déférent : aspect normal et variantes

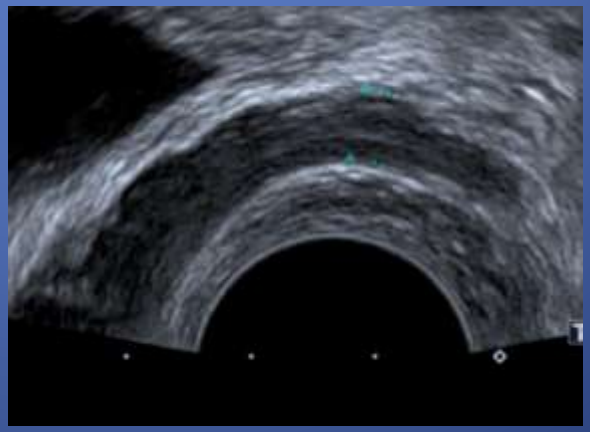

d
e
3
4
5
6
7
c
2
b
a
1

Voies génitales profondes normales

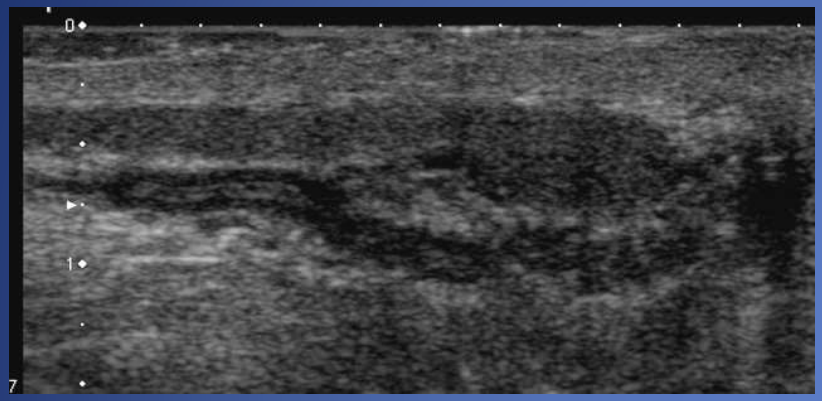




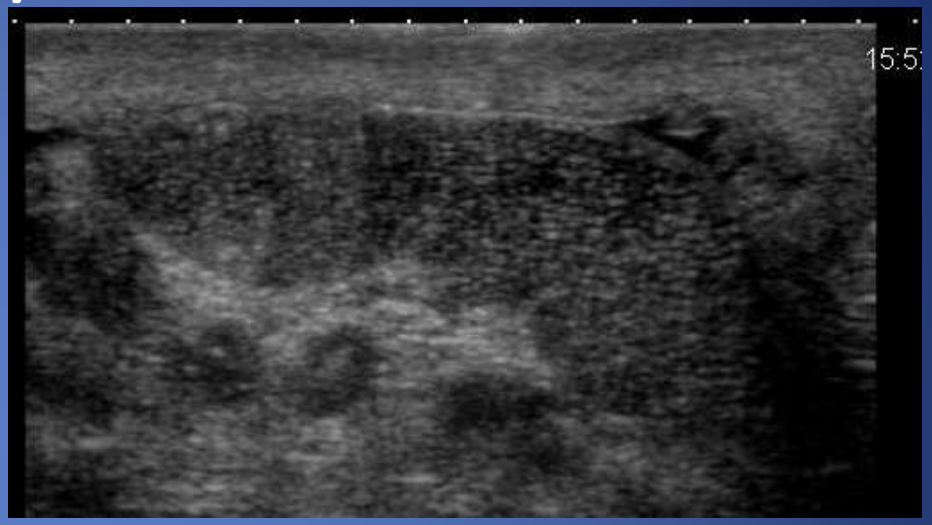


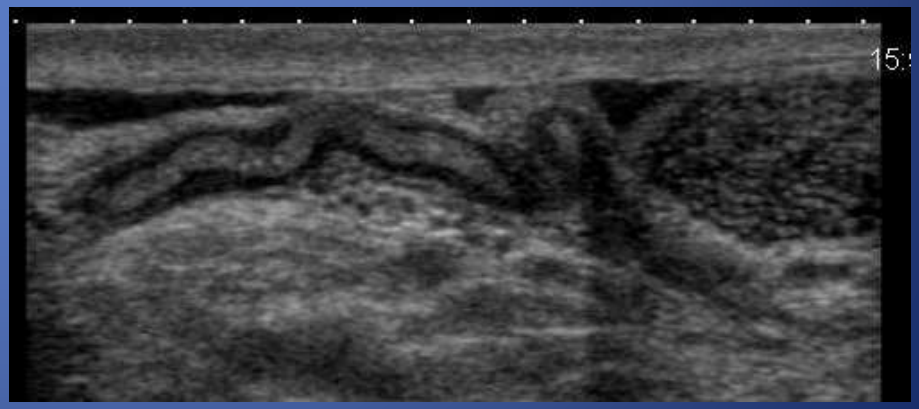


Les occlusions epididymaires/deferentielles



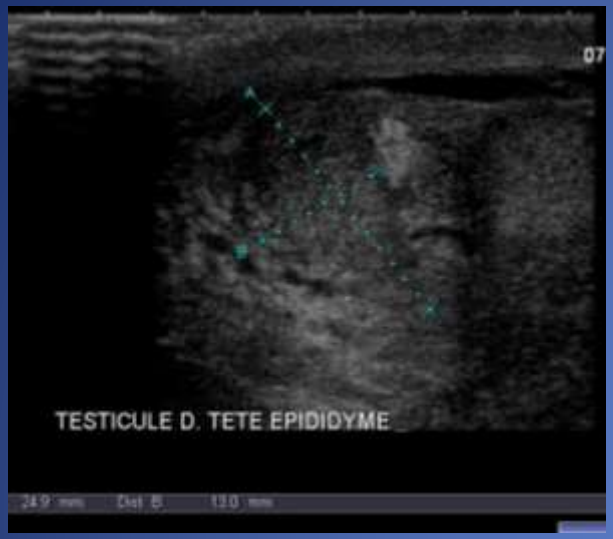
normal

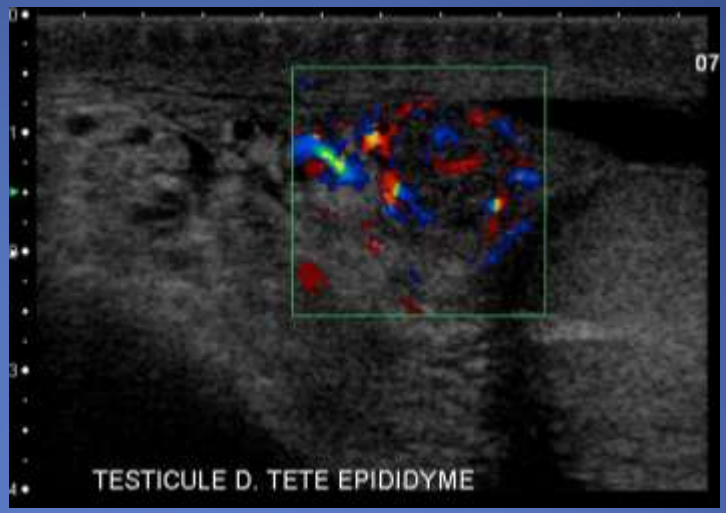


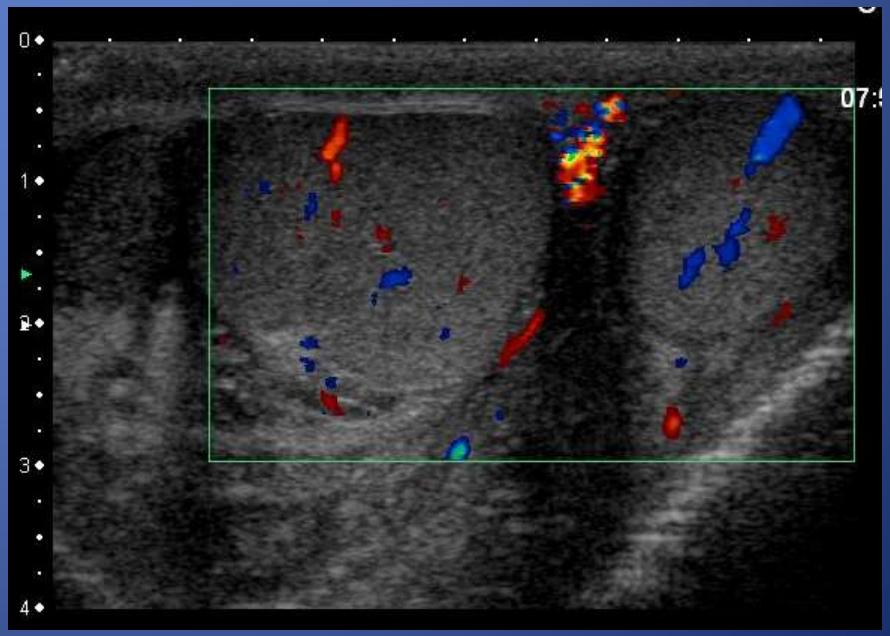


Occlusion

Épididymite aigue céphalique

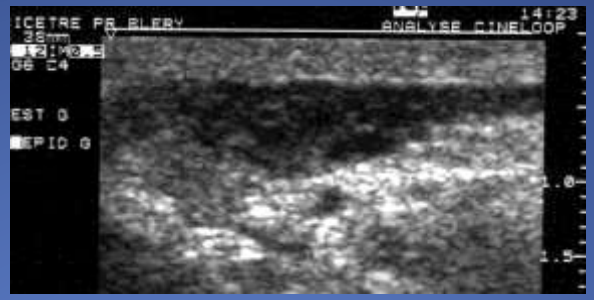




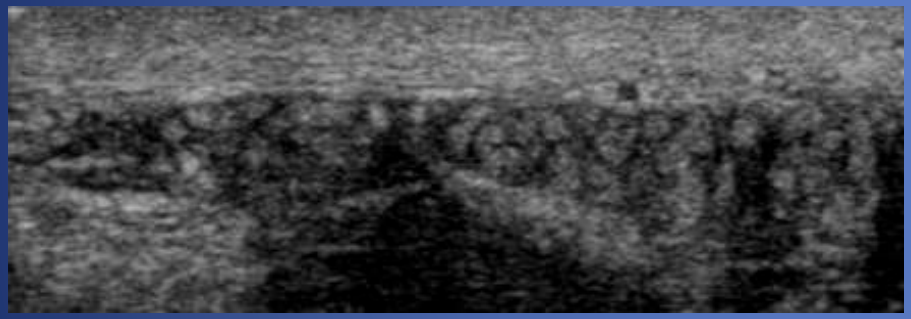


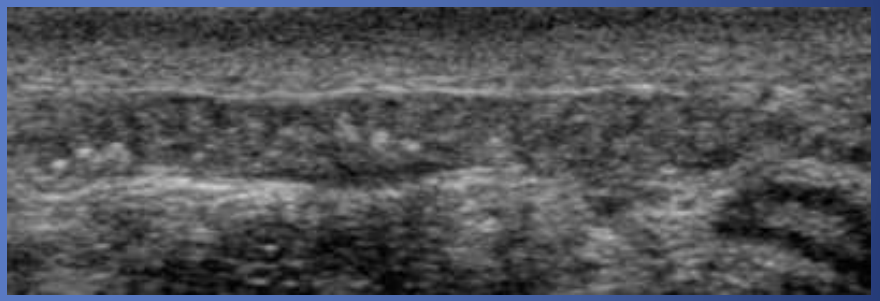
Absence de canaux déférents

- 2% à 10% des infertilités
- Parenté génétique entre les ABCD et la mucoviscidose (gène CFTR)
- Différentes possibilités :
  - Uni ou bilatérale
  - Agénésie rénale ou non
  - Absence ou non de vésicules séminales
  - Avec ou sans mutation de la mucoviscidose (gène CFTR)
    - Si agénésie rénale : pas de mutation du gène (anomalie du developpement embryologique)
    - Si rein présent : 2/3 de mutation

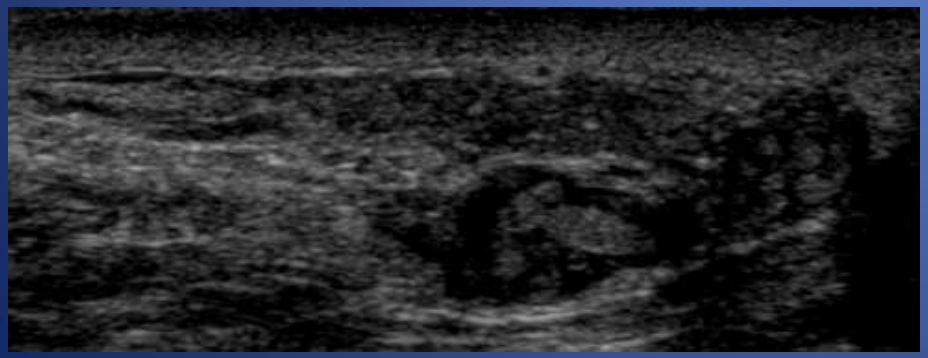


Agenesis of deferent duct : usual aspect
The epididymal body ends abruptly



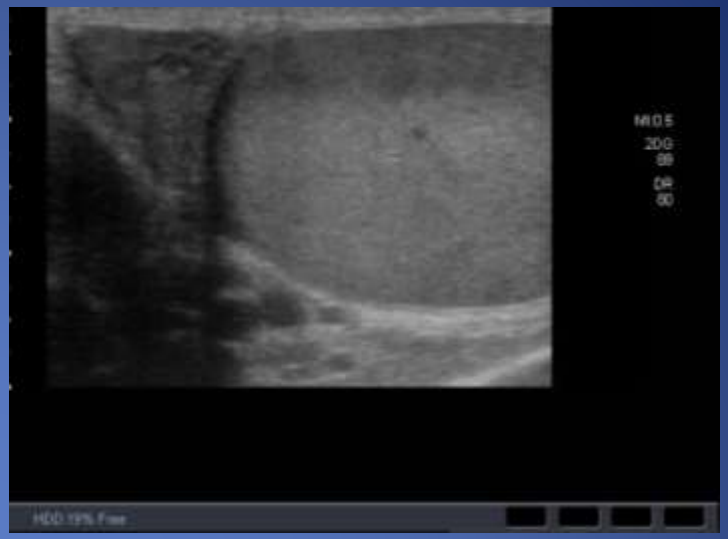


Unilateral aganesis of deferent duct: unusual lobulated, hyperechoic, and dilated aspect of the epididymal body



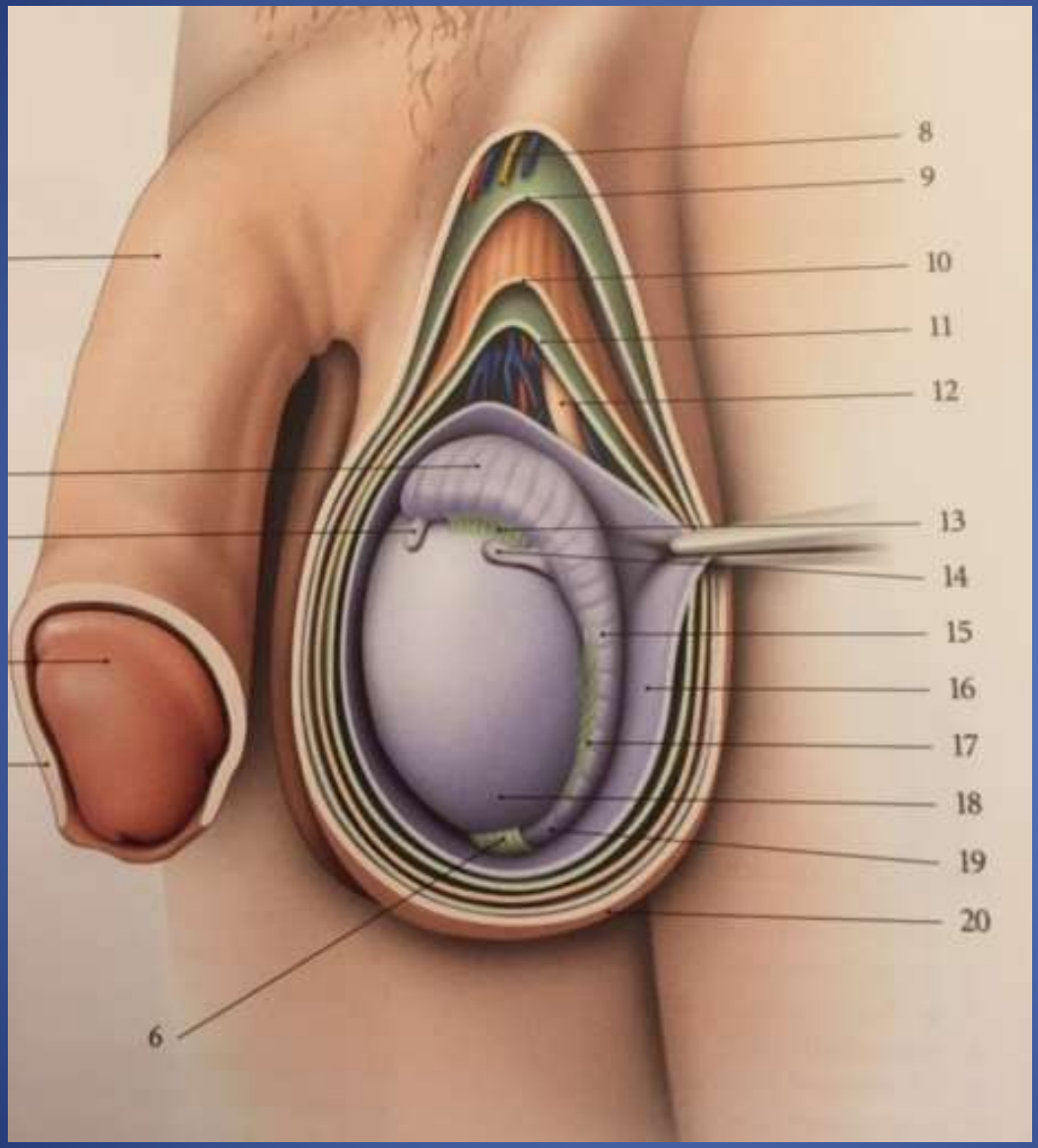
Same patient : the deferent duct ends abruptly


D.
MI:0.5
2DG
89
DR
80
HDD:30% Free


MI:0.5
2DG
89
DR
80


MI:0.7
2DG
92
DR
70
HDD:30% Free

Appendices hydatides



Kamina

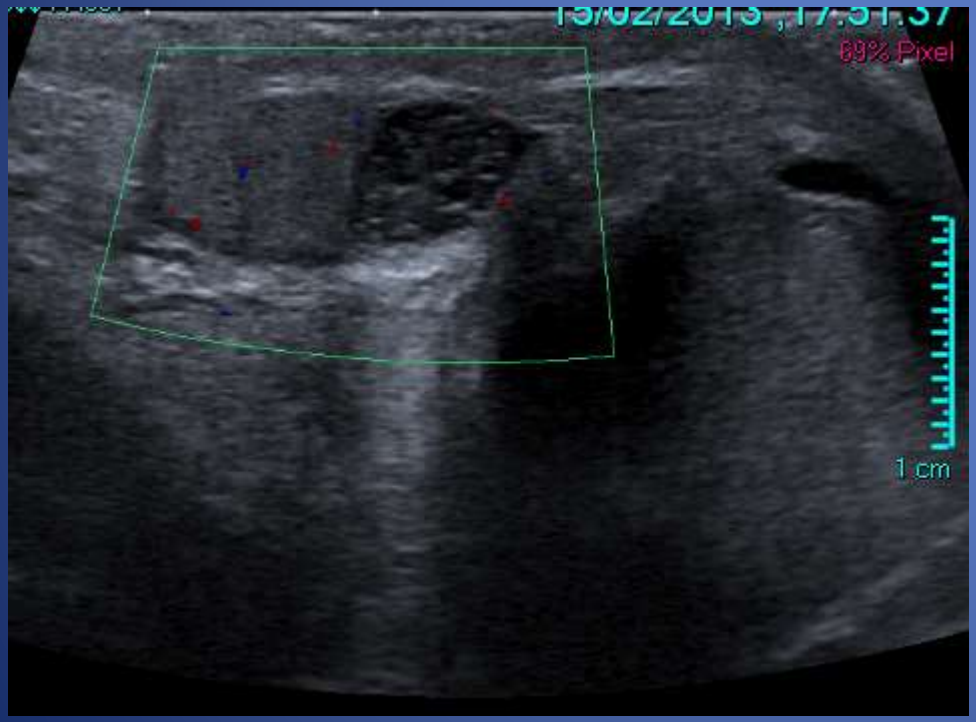
Les reliquats : les hydatides sessiles (muller)et pédiculées (wolf)

L'hydrocèle permet de mieux l'identifier
Elle est parfois volumineuse
Il s'agit d'aspect normaux

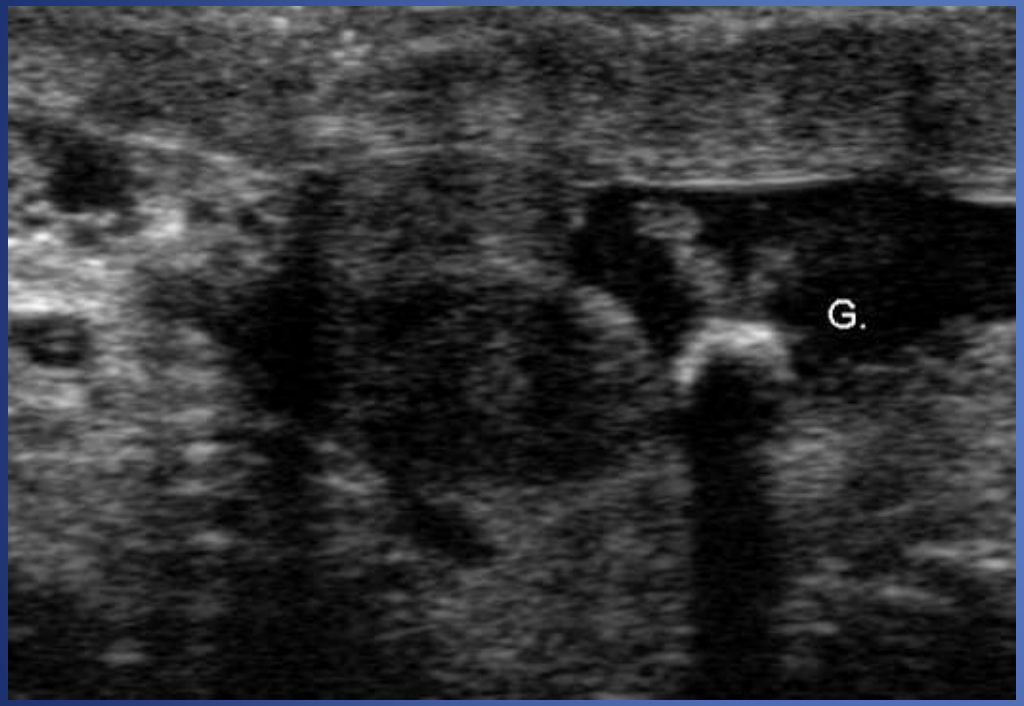

TOSHIBA
SERVICE PR BLERY
- OPE -
Testicule V
0
1
2
3
14L7
14.0
33 fps
MI:0.4
2DG
89
DR
80
HDD:63% Free

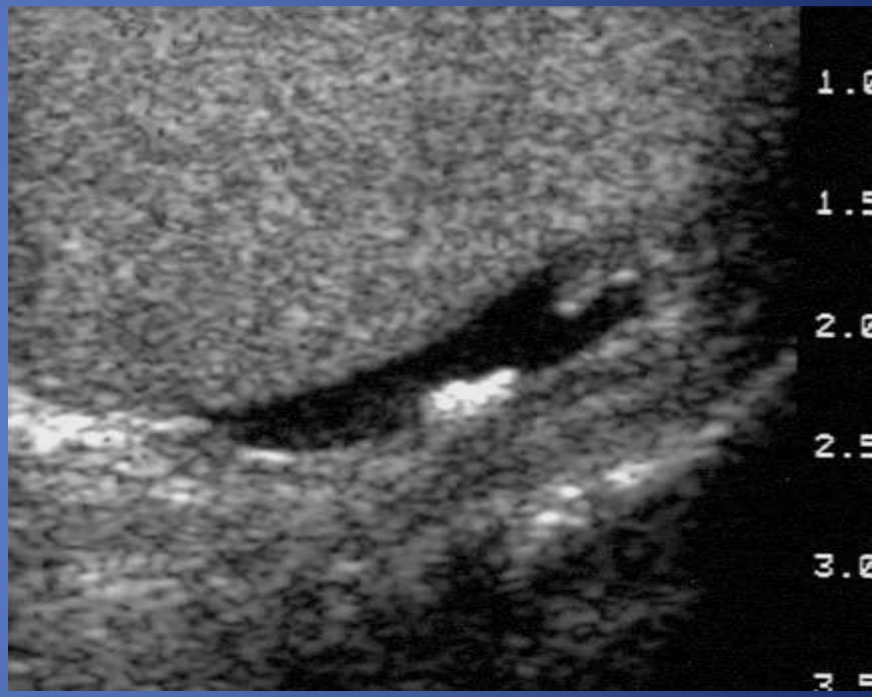
Torsion d’hydatide

- Enfant adolescent. Petite « boule » para epididymaire vacuolisée.

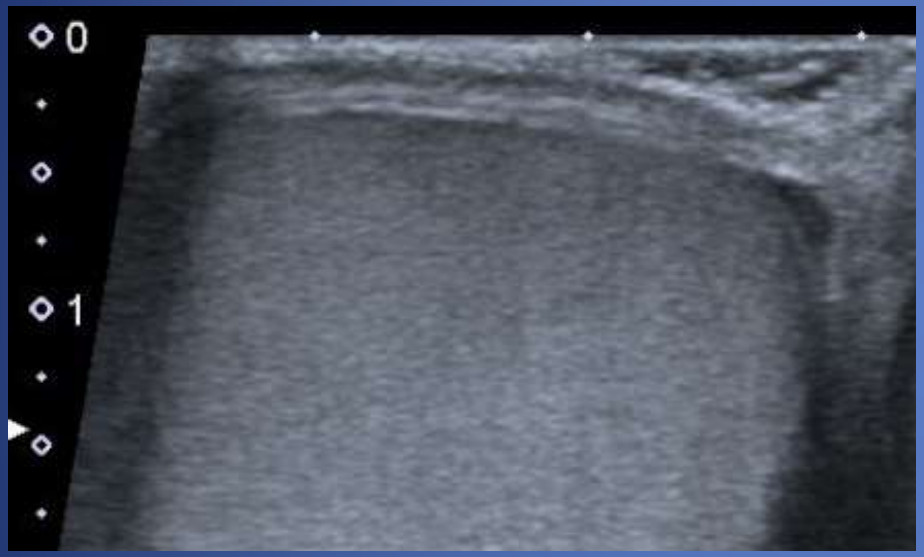


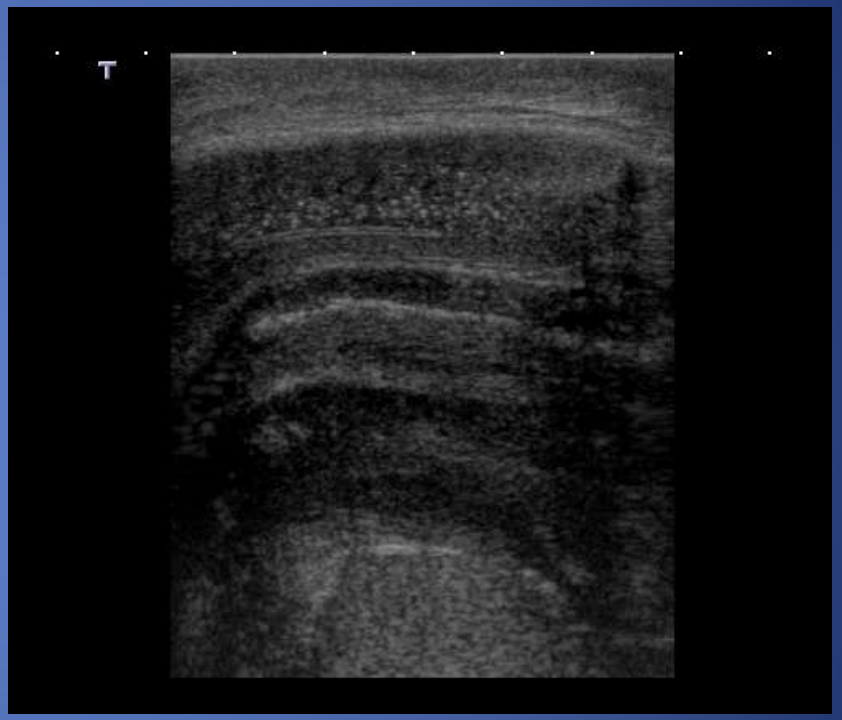
Scrotal calculi, scrotholiths, scrotal pearls …





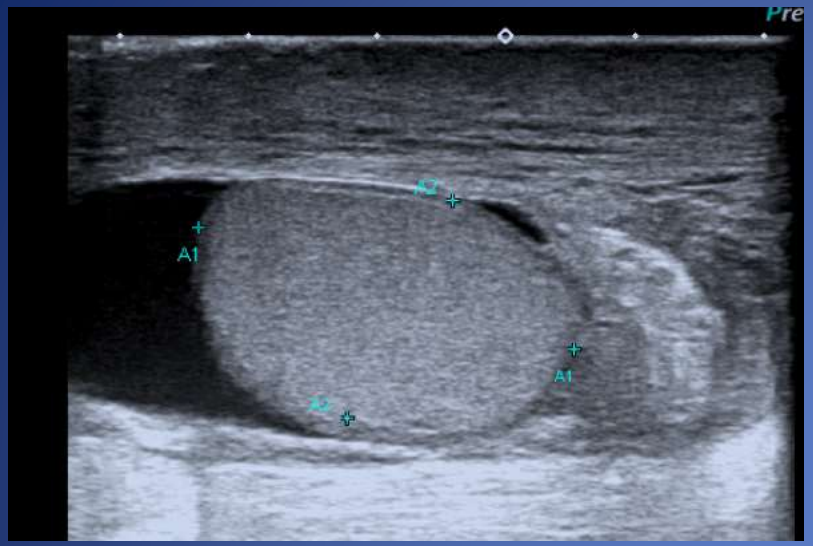
Tuniques normales et pathologiques

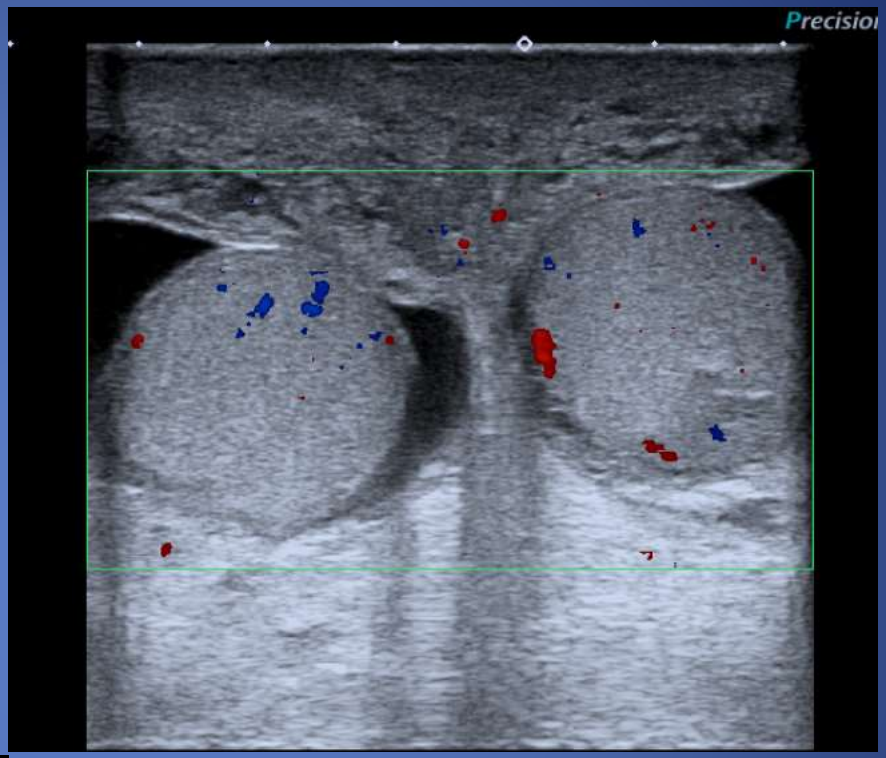




Simple surcharge ou
Dermo hypodermite ?

Tuniques :dermo hypodermite/hydrocele





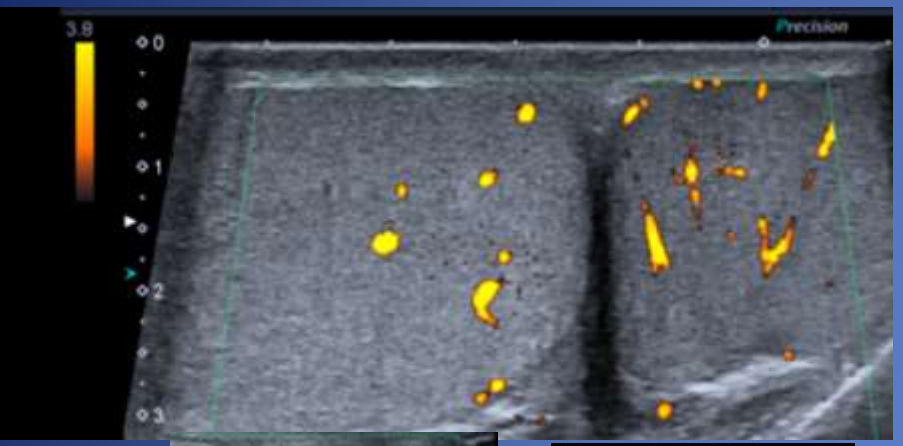
Epididyme droite

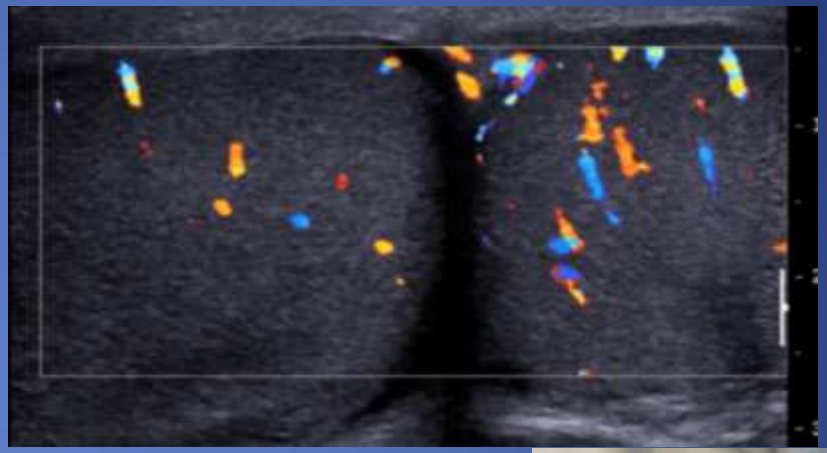
Epididyme gauche

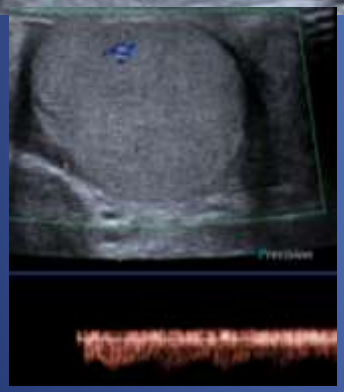
1 Le cordon normal
Il n’est pas toujours linéaire!

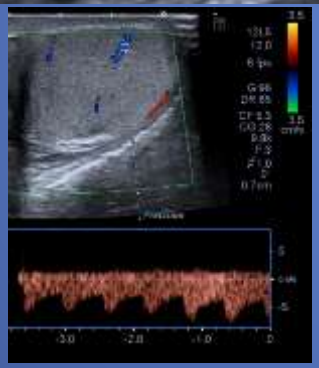
Scrotum aigu: un CR prudent s'impose !

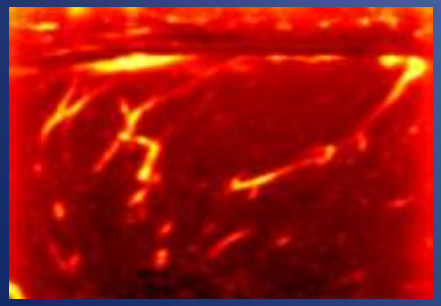
19 ans, douleur post avp moto il y a 3 semaines

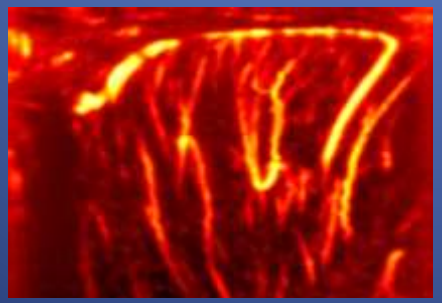






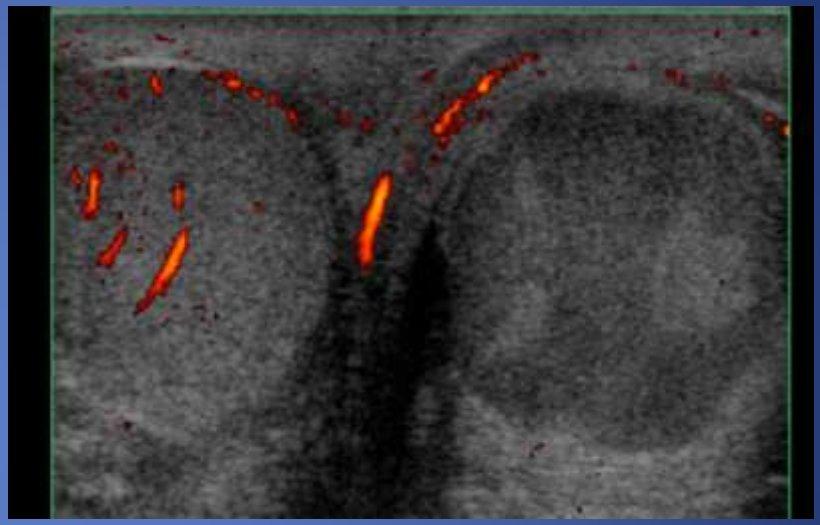


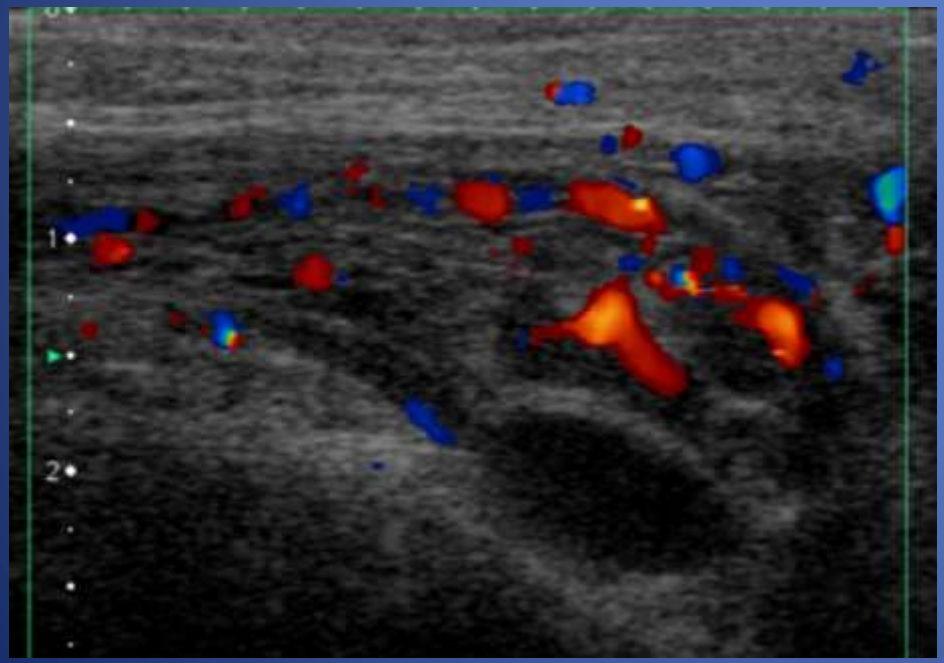


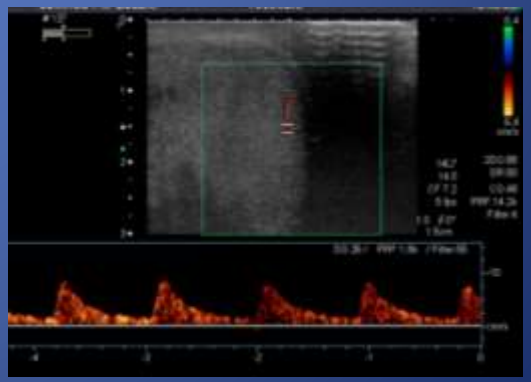


Il peut rester vascularisé en cas de torsion !

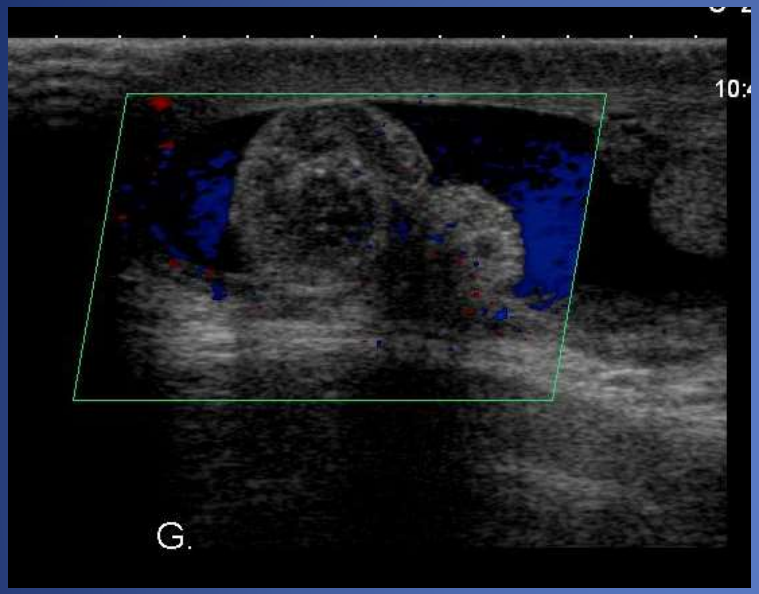
- 17 ans
- Douleur depuis 2 jours

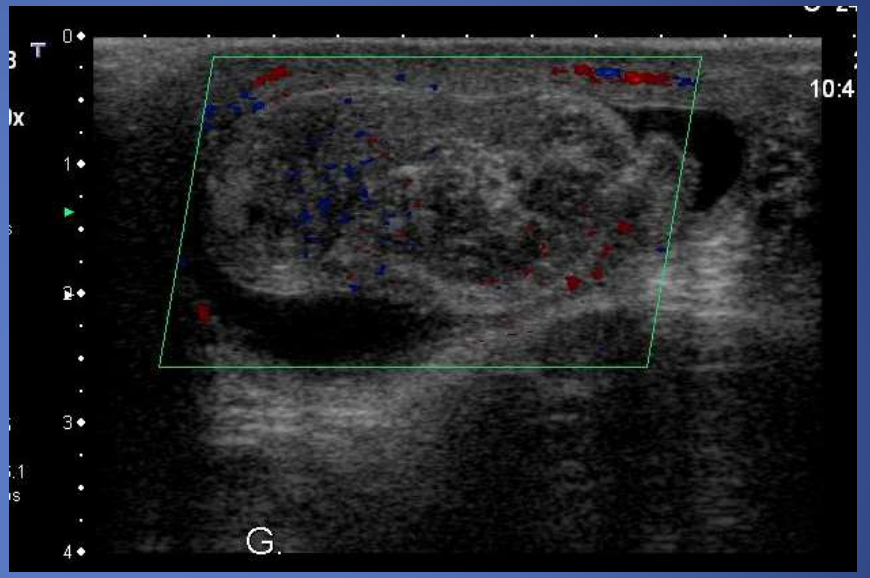


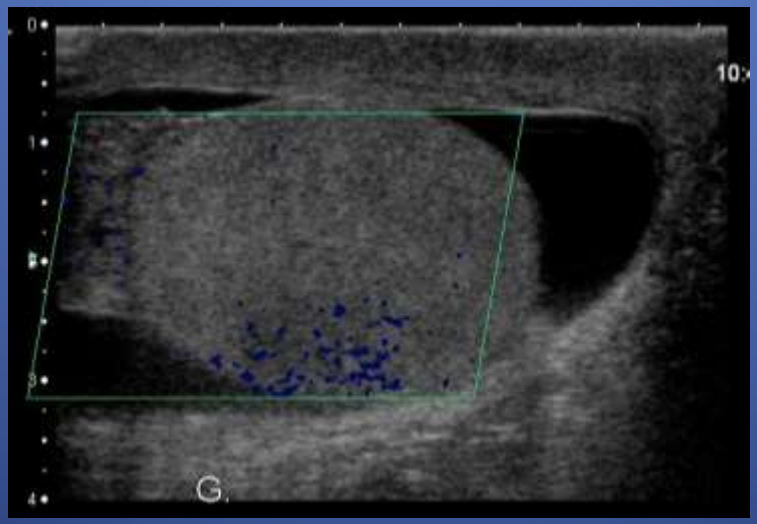




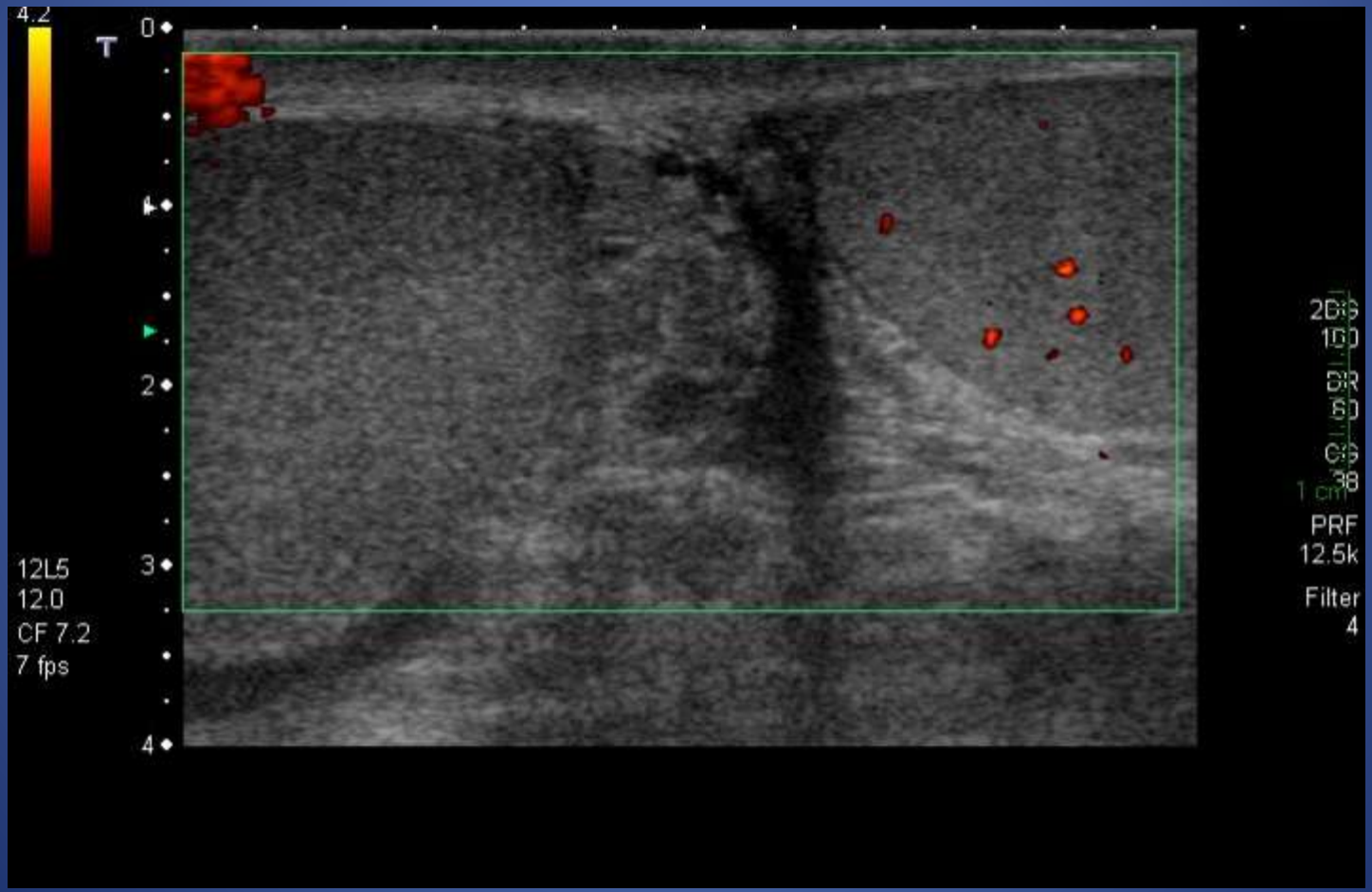
Douleur depuis 24 h, après un renvoi à domicile, sans écho-Doppler



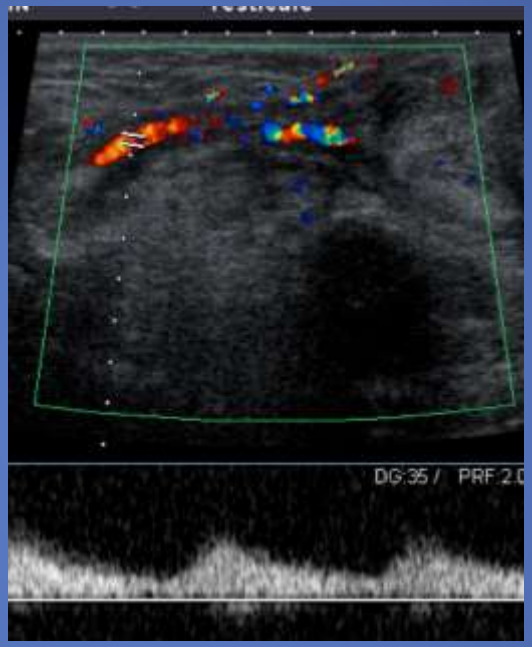


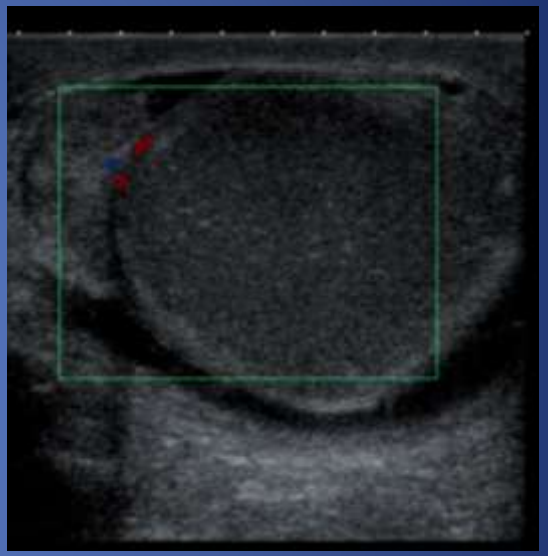


Asymétrie de vascularisation intratesticulaire: un bon signe !



Necrose post cure de hernie inguinale

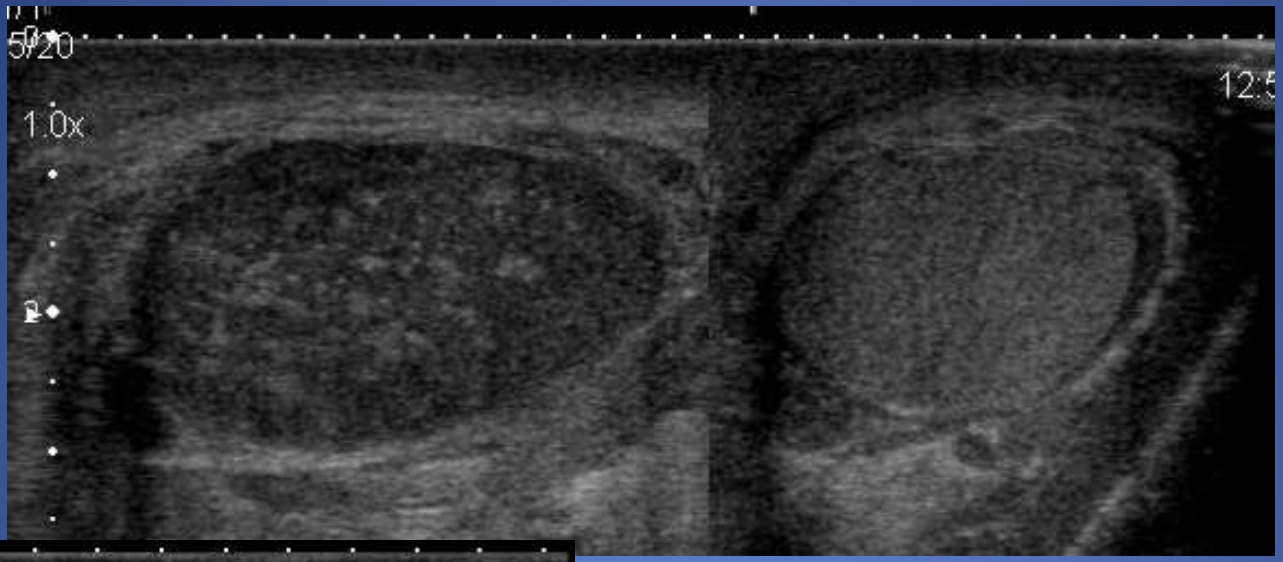


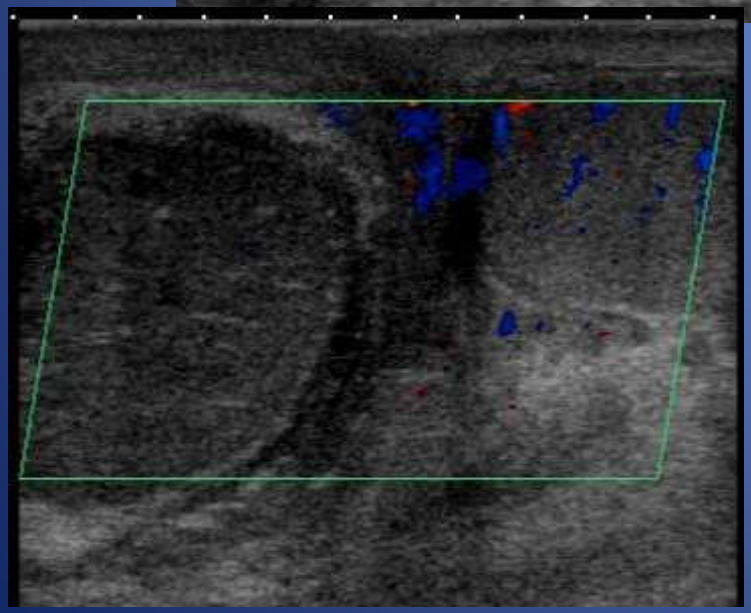


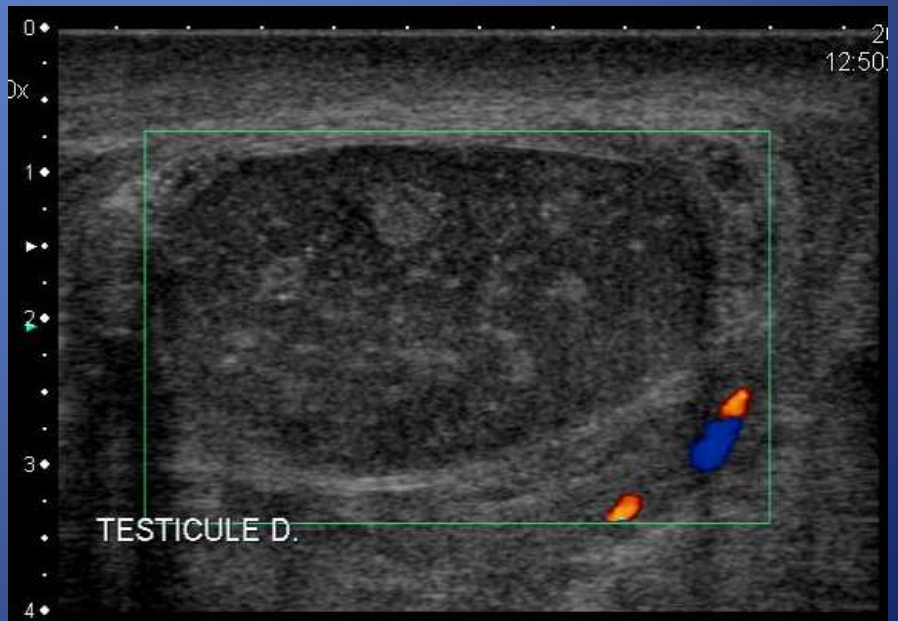
- Mécanisme inconnu : inflammation du cordon ?

Arch Ital Urol Androl. 2012 Sep;84(3):105-10. Urological complications following inguinal hernioplasty. Gulino G

post vasectomie : ligature de l'artère testiculaire

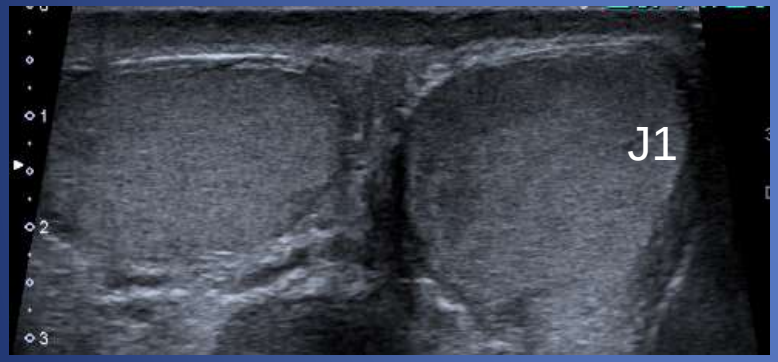


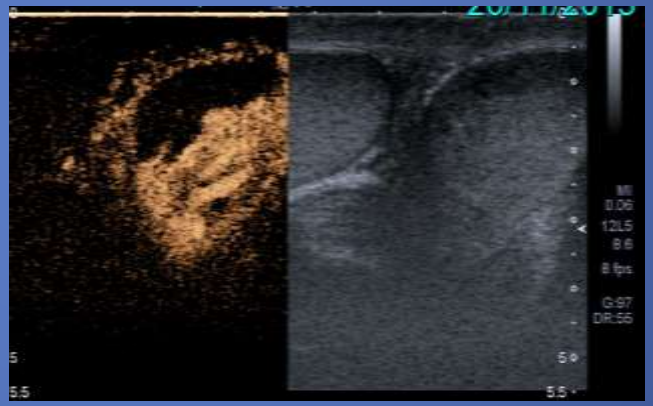


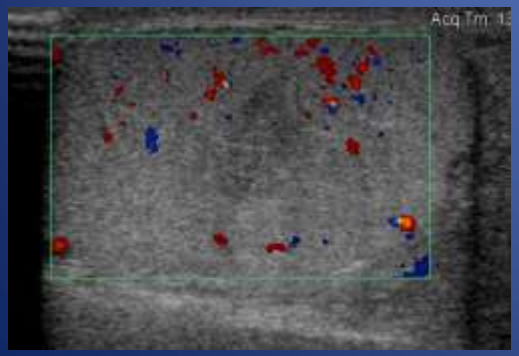


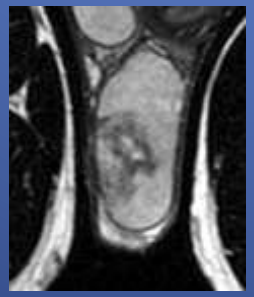
Douleur scrotale G aigue : pensez à l'infarctus testiculaire!

- J0

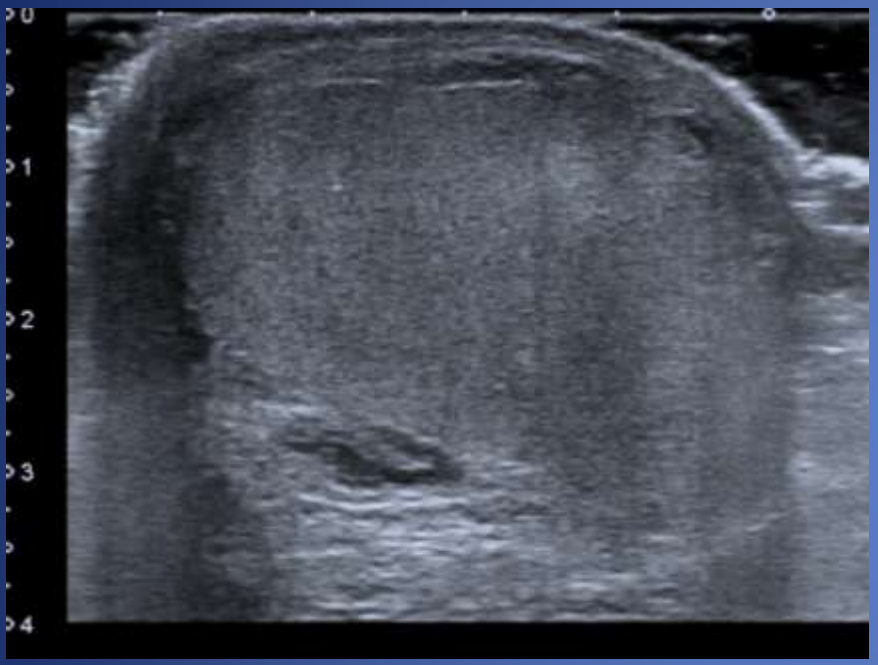


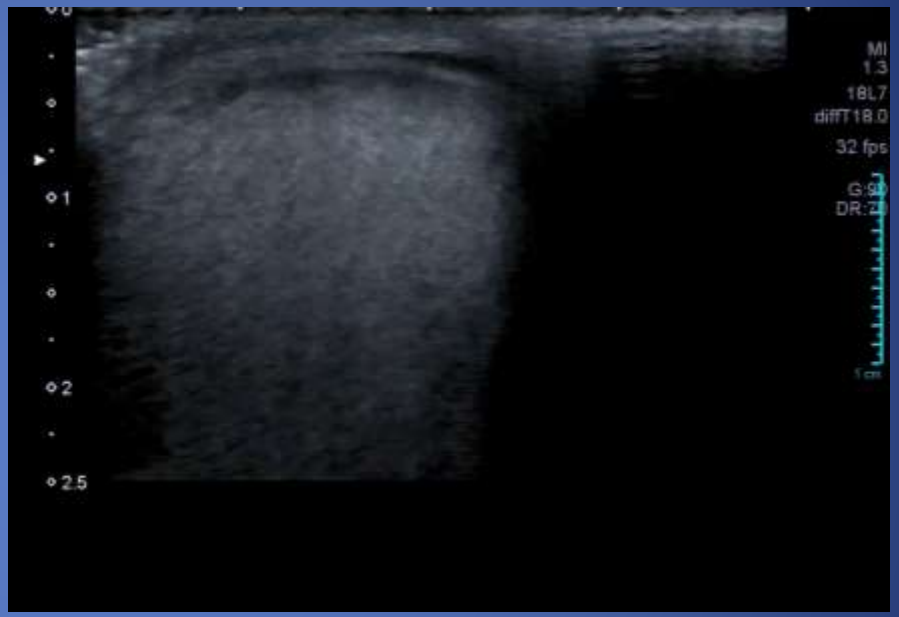






AVP moto, où est l'albuginée ?

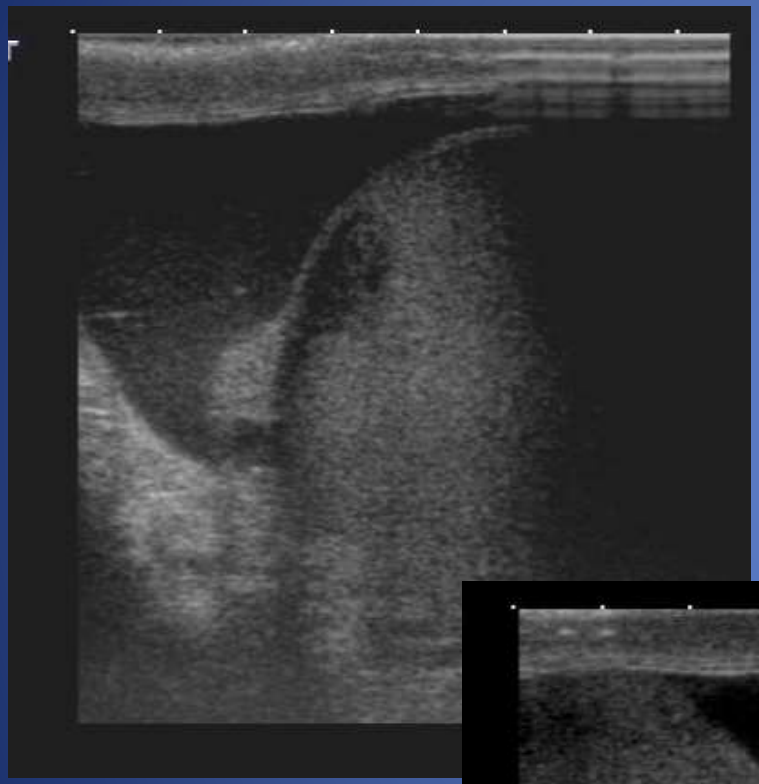


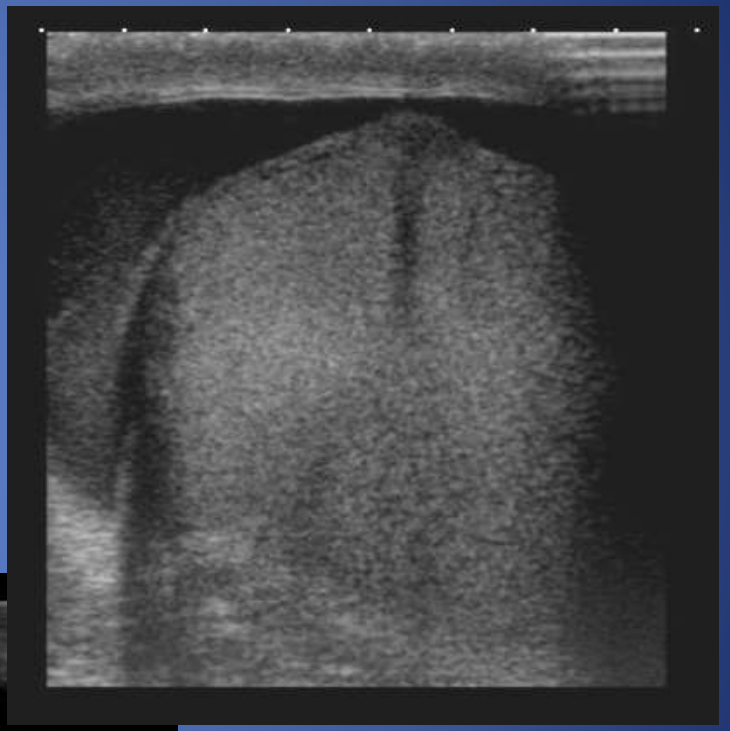


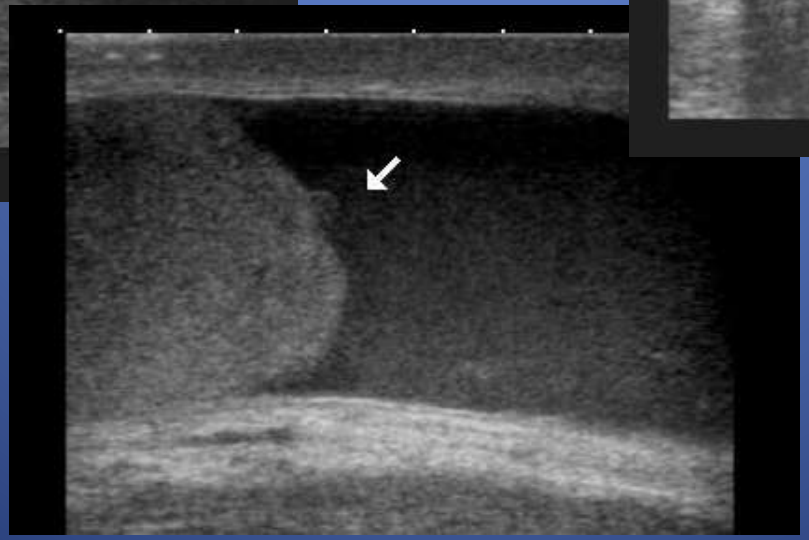
- Faire bouger le scrotum…délicatement ….

rupture de l’albuginée

Coup de pied







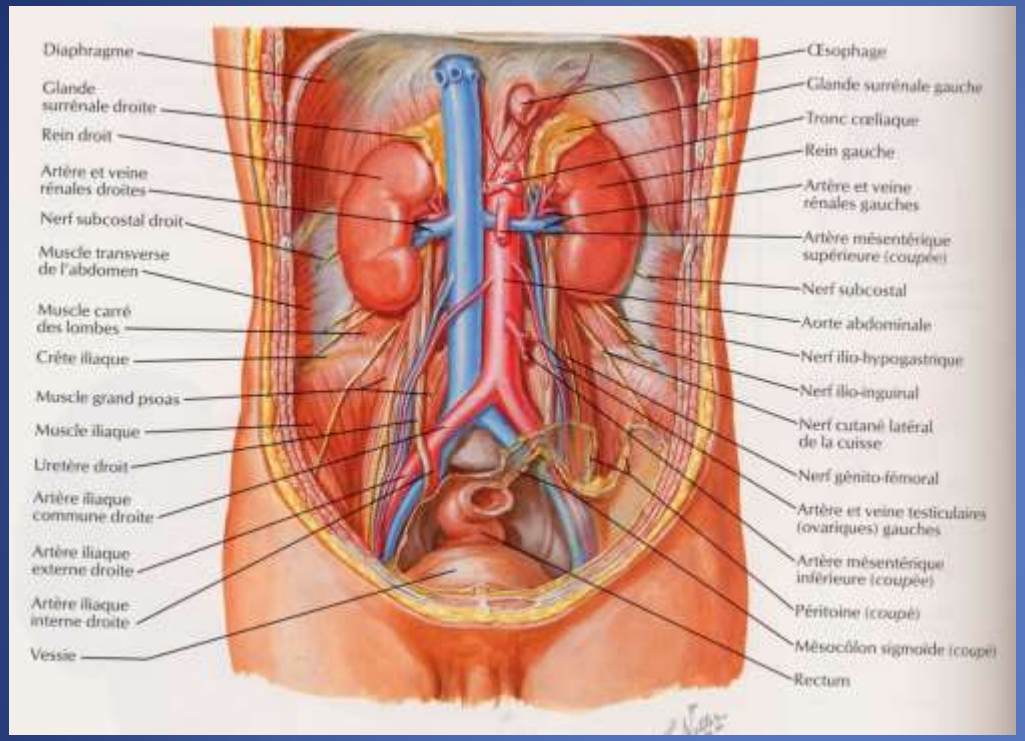
VARICOCELE

- Dilatation du plexus veineux pampiniforme
- 15% popoulation normale
- 40% population infertile (OAT)
- Classification initialement clinique
- Traitement des formes cliniquement palpable

VARICOCELE : Définition, symptômes

- dilatation du plexus veineux pampiniforme
- Douleur gêne, pesanteur, en position debout ou assise, s'aggravant avec le temps
- Jusqu'à 22% dans la population générale
- 40% chez l'homme infertile
- Hypofertilité
- Thrombose spontanée rare

Facteurs anatomiques



- 75 à 98 % a gauche
Plexus pampiniforme au niveau scrotal
Veines spermatiques, canal inguinal

A droite VCI
A gauche Veine renale G

Classification OMS (Dubin et Amelar)

- Infra clinique : vue uniquement par l'echo-Doppler
- Grade 1 : varicocèle palpable pendant la manœuvre de Valsalva
- Grade 2 : palpable au repos mais non visible
- Grade 3 : visible et palpable au repos.

Spermogramme : normes OMS 2010

- Volume ejaculat > 1,5 mL
- Nombre : > 15 Millions /mL
- Mobilité progressive > 32 % (a+b), a, flechant rapide, b lent et progressif.
- Vitalité > 58%
- % formes typiques > 4%

Physiopathologie de l'infertilité en cas de varicocèle

- Chaleur, hemodynamique (pression)
- Toxiques

- Stress Oxydatif , hypoxie : production de radicaux libres….ROS : reactive oxygen species dans le liquide séminal et dans le cytoplasme du spermatozoide
- immunologie
- DNA damage…
- Diminution du volume testiculaire

- Agarwal A, Sharma R, Durairajanayagam D, Ayaz A, Cui Z, Willard B, Gopalan B, Sabanegh E. Major protein alterations in spermatozoa from infertile men with unilateral varicocele. Reprod Biol Endocrinol. 2015
- Garolla A, Torino M, Miola P, Caretta N, Pizzol D, Menegazzo M, Bertoldo A, Foresta C. Twenty-four-hour monitoring of scrotal temperature in obese men and men with a varicocele as a mirror of spermatogenic function. Hum Reprod. 2015 Mar

L’écho-Doppler

- Critères morphologiques
- Critères hémodynamiques
- Critères prédictifs quantitatifs ?

PB Echo-Doppler : où et que enregistre-t-on ?

Multiples classifications en fonction de…

- Taille des veines
- Reflux spontané au repos
- Reflux rythmé par la respiration
- Reflux a la maneuvre de valsalva
- Reflux en orthostatisme
- Vitesse du reflux
- Durée du reflux
- Lieu du reflux

Critères morphologiques

- **Veines > 2,5 -3 mm au repos et après Valsalva: corrélé à la présence d'une varicocèle « clinique »**
- **Importance du volume testiculaire +++**
  - **Volume bi testiculaire <30mL quadruple la chance d'avoir une concentration de moins de 20 M/mL**

    Kurtz MP, Zurakowski D, Rosoklija I, Bauer SB, Borer JG, Johnson KL, Migliozzi M, Diamond DA. Semen Parameters in Adolescents with Varicocele: Association with Testis Volume Differential and Total Testis Volume. J Urol. 2015 Mar 23.
- **Importance de l'orthostatisme**

Kim YS, Kim SK, Cho IC, Min SK. Efficacy of scrotal Doppler ultrasonography with the Valsalva maneuver, standing position, and resting-Valsalva ratio for varicocele diagnosis. Korean J Urol. 2015 Feb;56(2):144-9

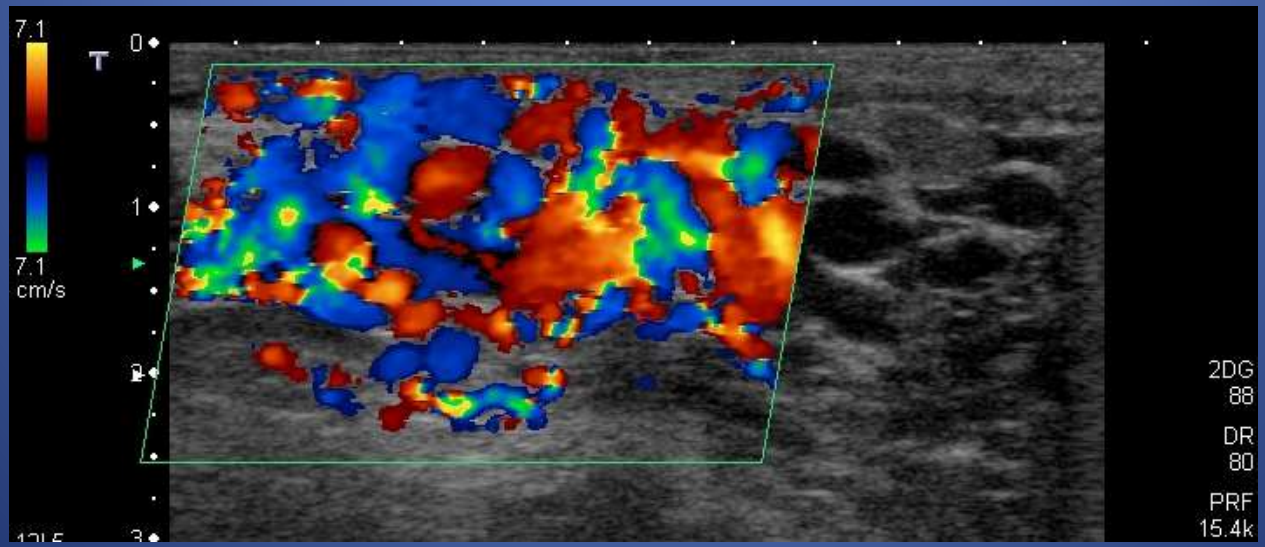
- Extension au voisinage de la queue, sous l'albuginée, en intratesticulaire

Critères hémodynamiques

- Reflux à la manœuvre de valsalva > 2 s.
- Sang souvent spontanément échogène
- Après traitement : les veines restent dilatées, mais sans reflux

Varicocele

- Veines > 2,5 à 3 mm
- Quantité : subjectif …
- Reflux à la maneuvre de valsalva > 1 s
- Sang souvent spontanément échogène
- Extension au voisinage de la queue, sous l'albuginée, en intratesticulaire
- Après traitement : les veines restent dilatées, mais sans reflux



Classification Sarteschi

- Grade 1 : reflux a l'emergence des veines scrotales (MV), hypertrophie paroi veineuse sans stase
- Grade 2 : reflux supra testiculaire (MV) stase
- Grade 3 : peritesticulaire (VM)
- Grade4 : reflux spontané, augmentant a laMV, hypotrophie, varicosités du plexus pampiniforme
- Grade 5 : reflux spontané, sans augmentation MV
- Hypotrophie, varicosites du plexus.

Hoestra

- 0 : pas de dilatation veineuse
- 1 : veine < 2,5 mm sans reflux
- 2: veine 2,5-3,5, avec reflux MV
- 3 : veine >3,5 , reflux MV

Hirsch

- 1 : reflux MV, non spontané
- 2 : intermittent spontané
- 3 : continu

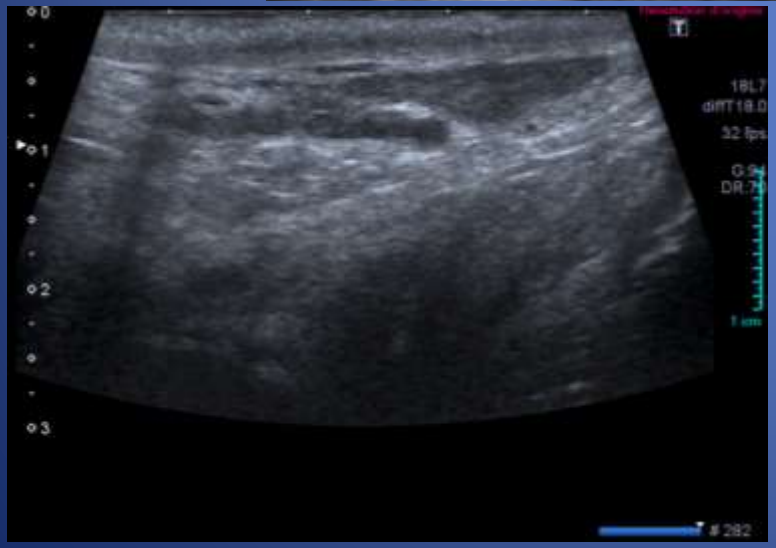
Oyen

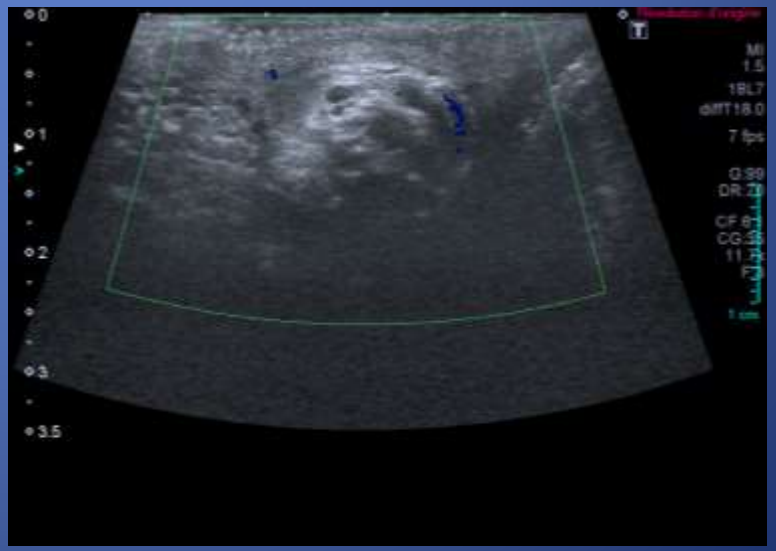
- 1 : reflux modéré <2s durant MV
- 2 : reflux > 2s durant MV, mais non continu
- 3 : reflux repos et continu durant MV

Iosa

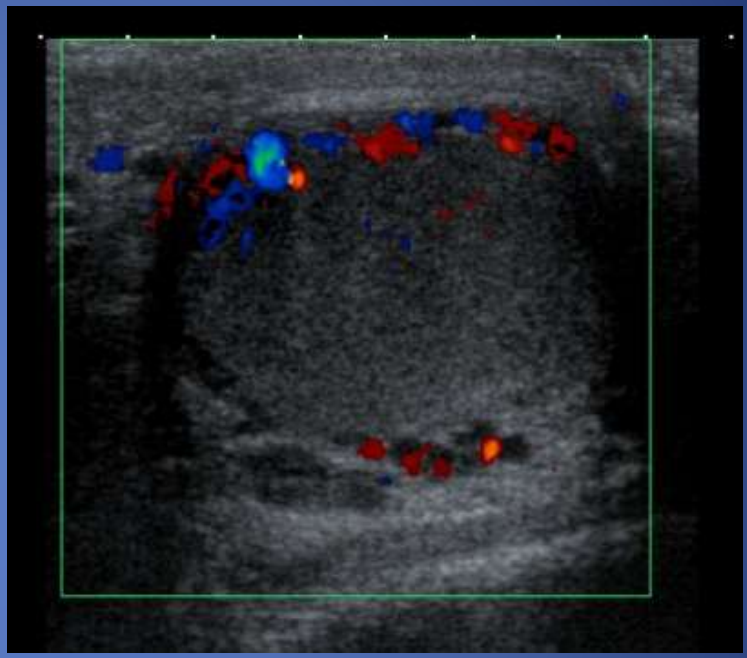
- 1 : reflux >1 s durant MV
- 2 : reflux intermittent spontané, sans augmentation à la MV
- 3 : intermittent spontané, avec augmentation a la MV
- 4A : continu spontané, sans augmentation à la MV
- 4B : continu spontané, augmentant à la MV

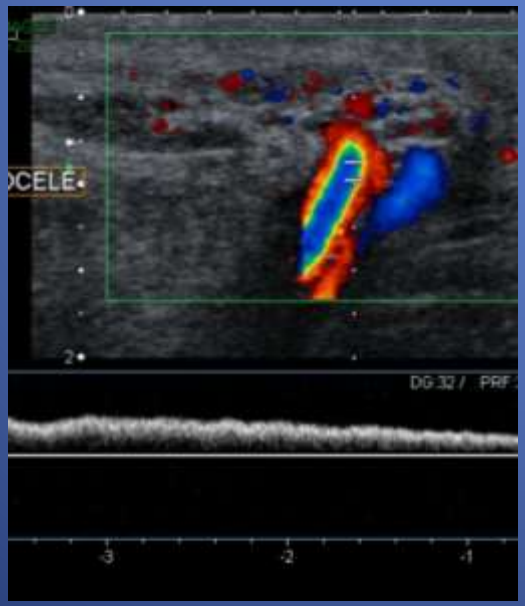
35 ans OAT sévère



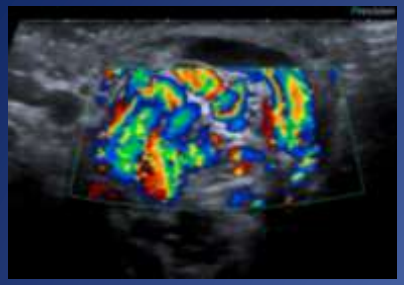


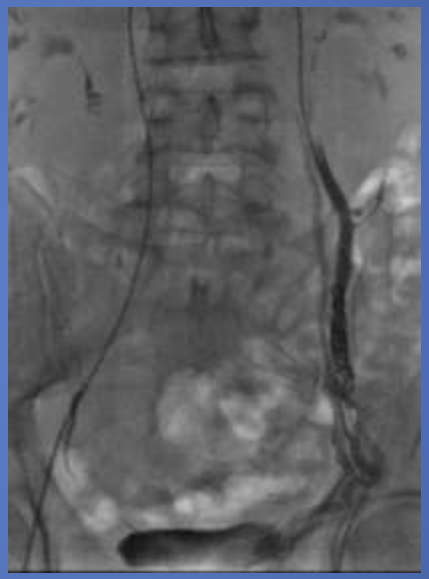
Répartition périphérique sous albuginée



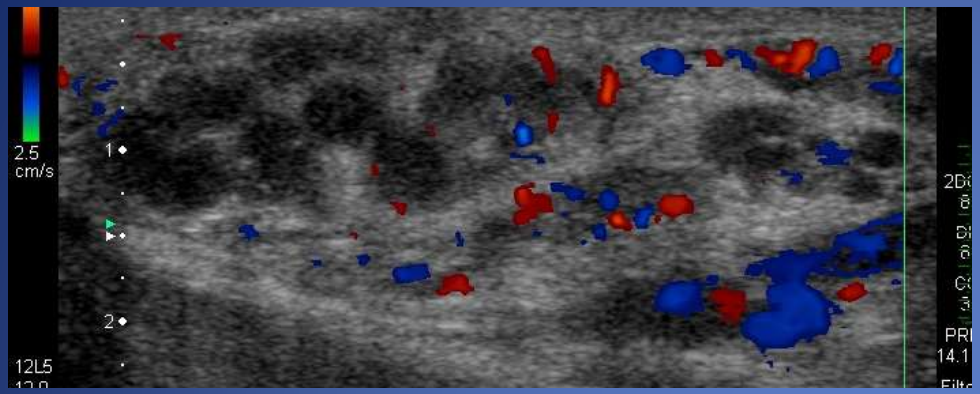


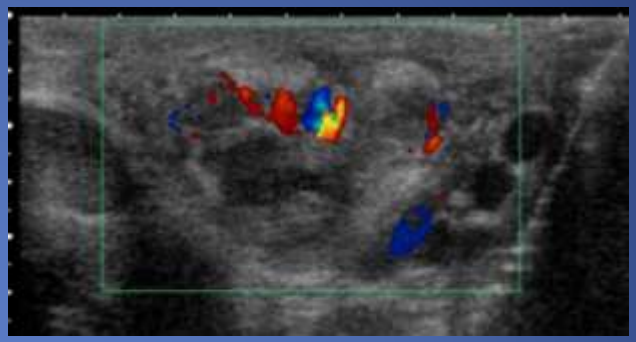
39 ans infertilité

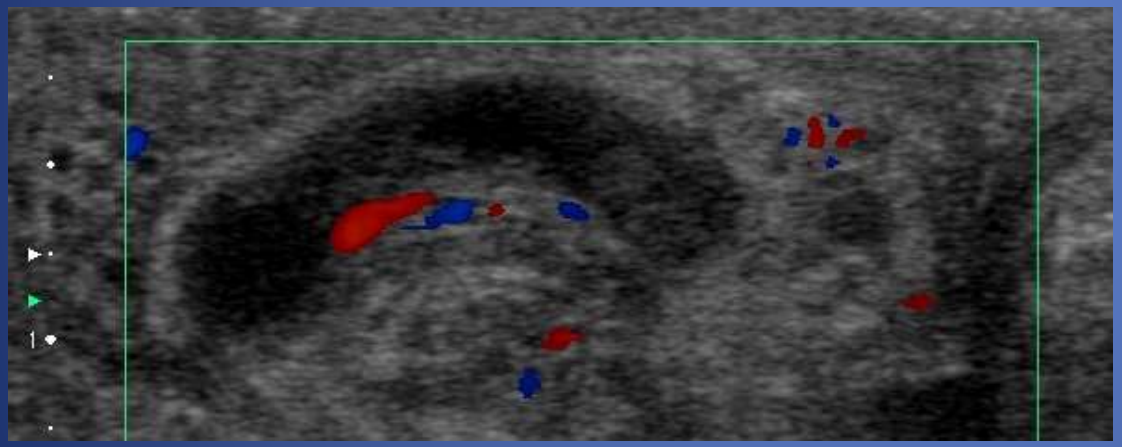


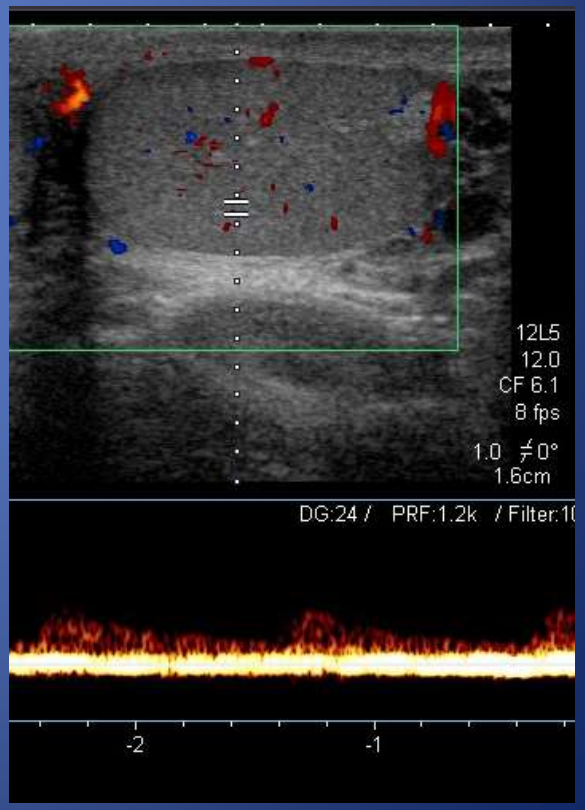


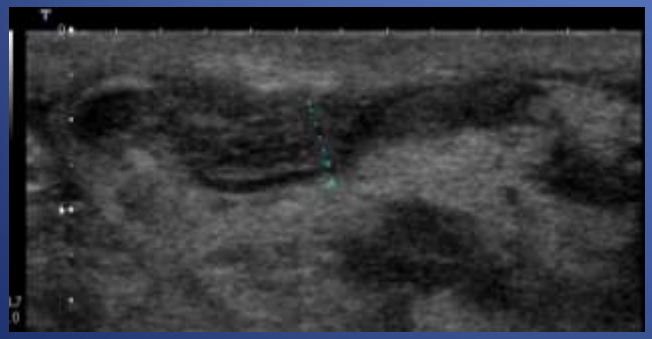
Thrombose varicocèle : douleur , tuméfaction cordon



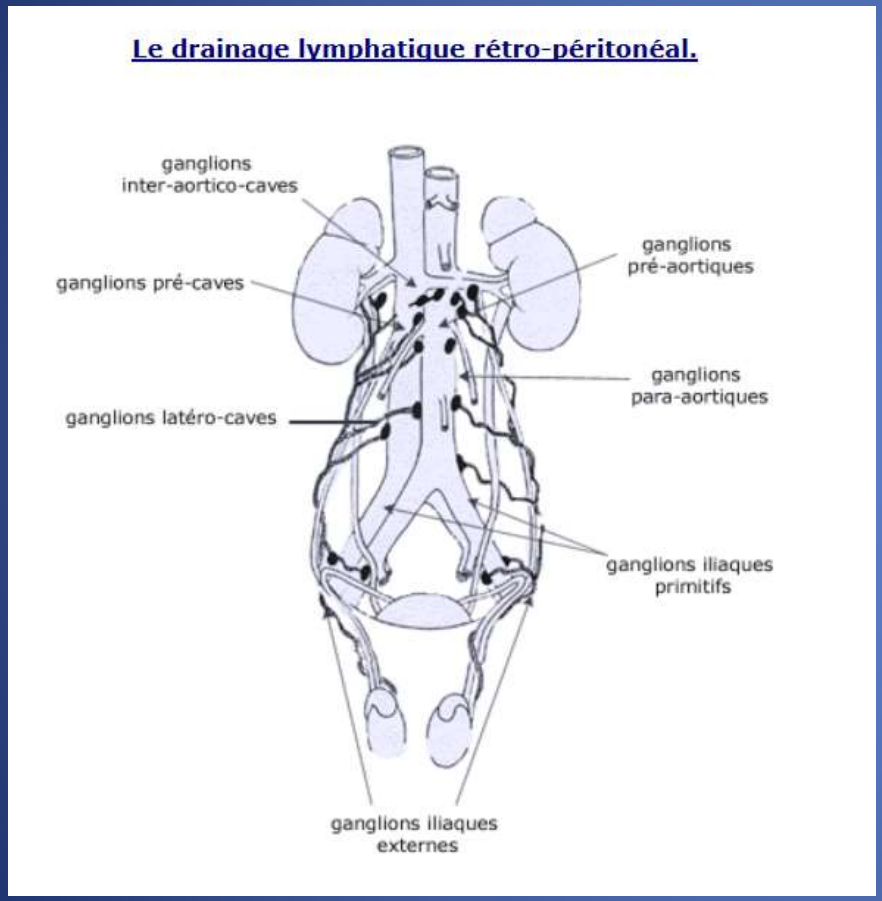


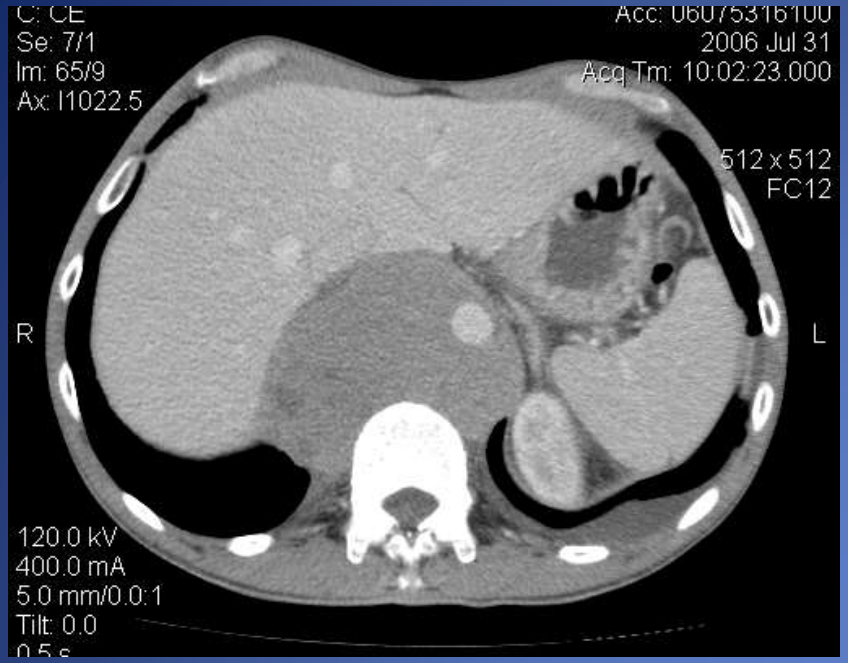






Les relais ganglionnaires

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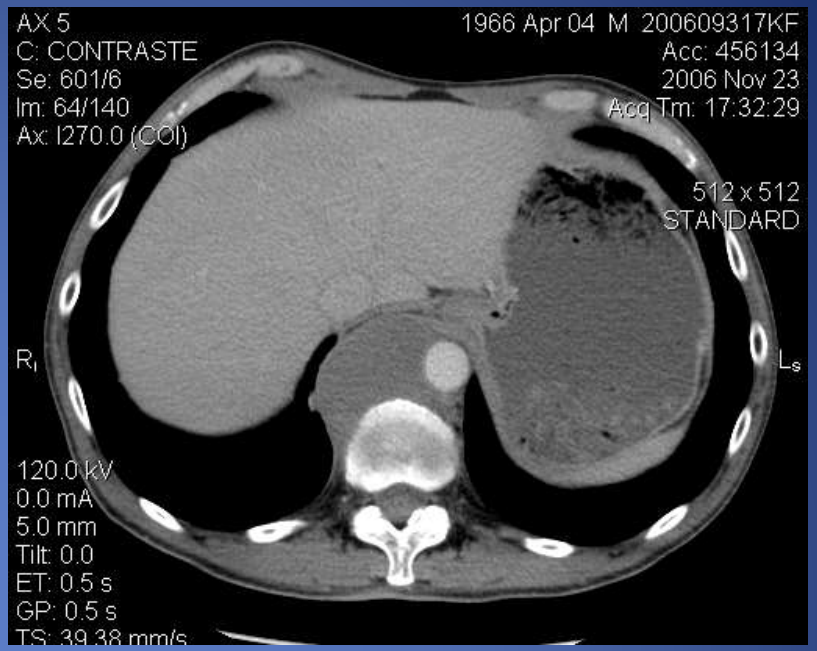
Se: 7/1
Im: 65/9
Ax: I1022.5
Acc: 06075316100
2006 Jul 31
Acq Tm: 10:02:23.000
512 x 512
FC12
R
L
120.0 kV
400.0 mA
5.0 mm/0.0:1
Tilt: 0.0


AX 5
C: CONTRASTE
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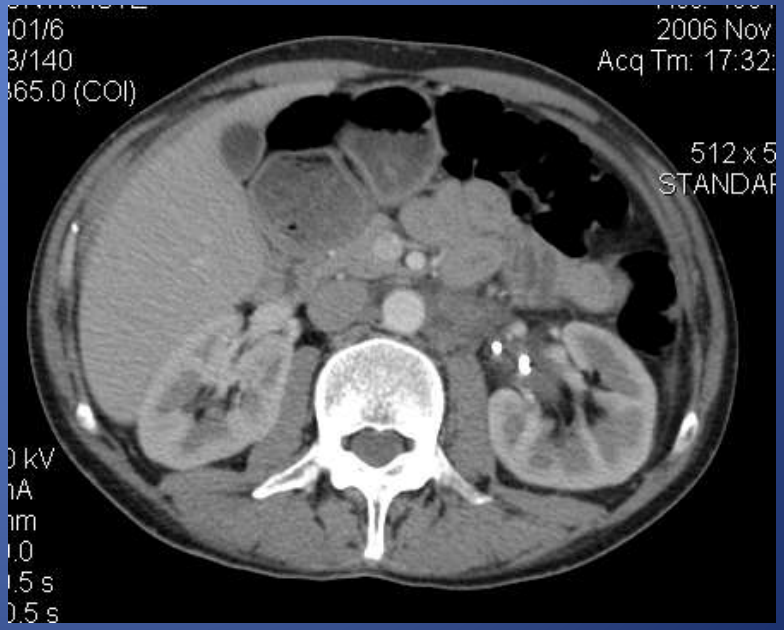
Im: 64/140
Ax: I270.0 (COI)
1966 Apr 04 M 200609317KF
Acc: 456134
2006 Nov 23
Acq Tm: 17:32:29
512 x 512
STANDARD
R
L
120.0 kV
0.0 mA
5.0 mm
Tilt: 0.0
ET: 0.5 s
GP: 0.5 s


I1102.5
512
0.0 kV
0.0 mA
mm/0.0:1


2006 Nov
512 x 5
STANDAR

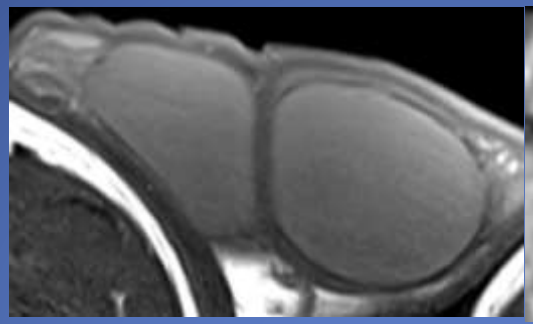
L’IRM scrotale

- **Indications limitées** : doute sur le caractère extra ou intra testiculaire d’une masse, lipome du cordon , infarctus testiculaire, caracterisation : work in progress ?
- Petite antenne de surface

- T1, T2, FS+/- gadolinium

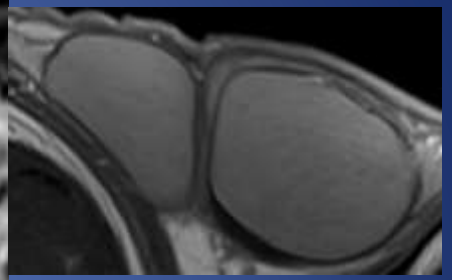
Resultats normaux

T2

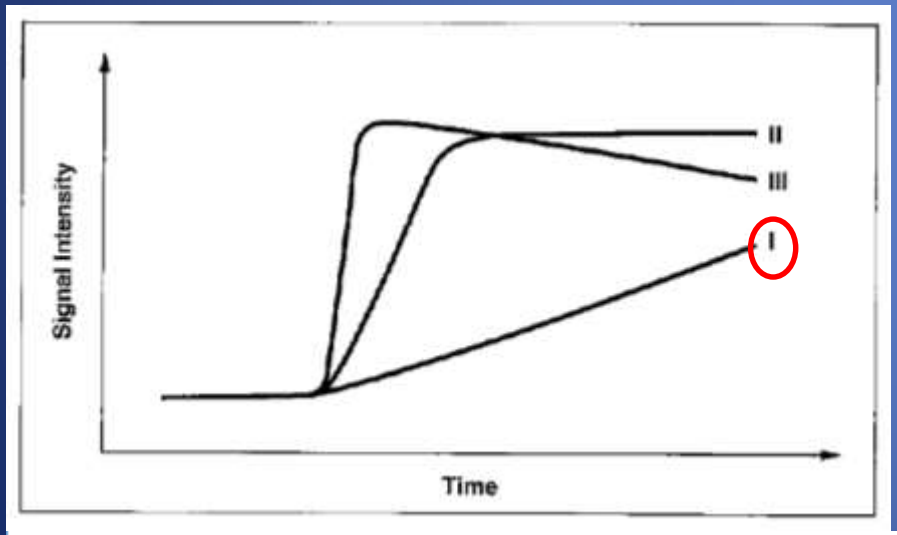


T1

ADC : 1.1



T1 gado



Linear increase

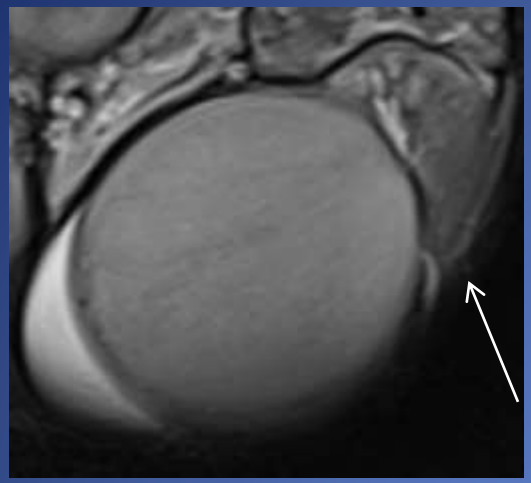
Dynamic Contrast-Enhanced Subtraction MRI for Characterizing Intratesticular Mass Lesions

Athina C. Tsili[1]

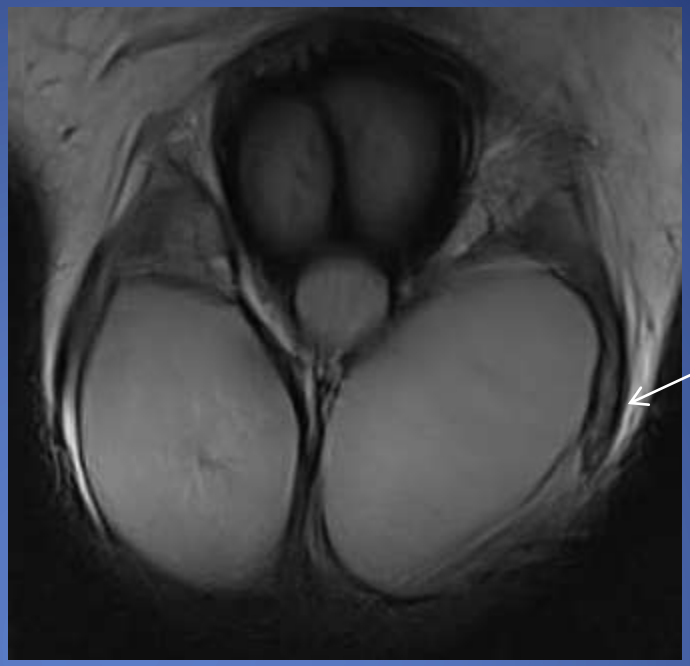
Apparent diffusion coefficient values of normal testis and variations with age

Athina C Tsili,[1] Dimitrios Giannakis,[2] Anastasios Sylakos,[2] Alexandra Ntorkou,[1] Loukas G Astrakas,[3] Nikolaos Sofikitis,[2] and Maria I Argyropoulou[1]

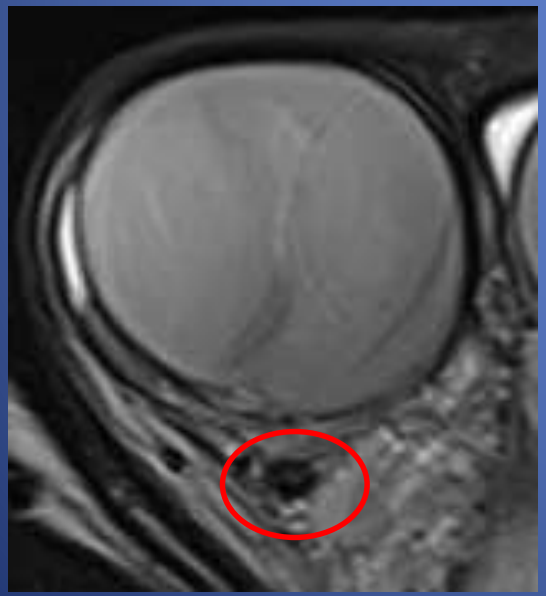
ADC value Increase with advencing age



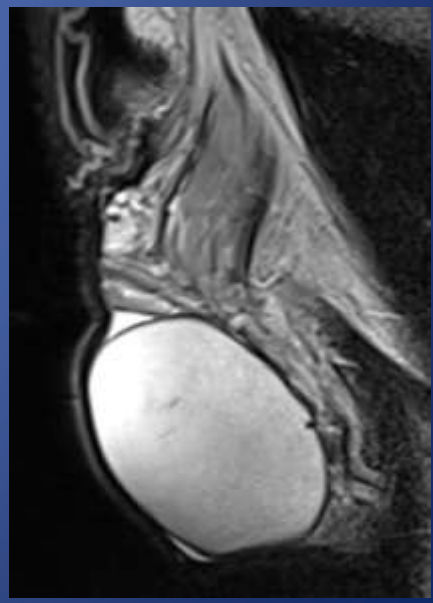
Tete de l’epididyme



corps

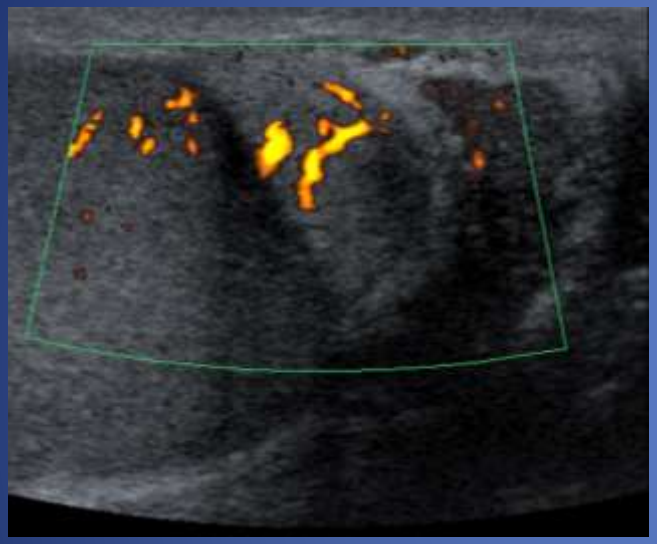


Deferent

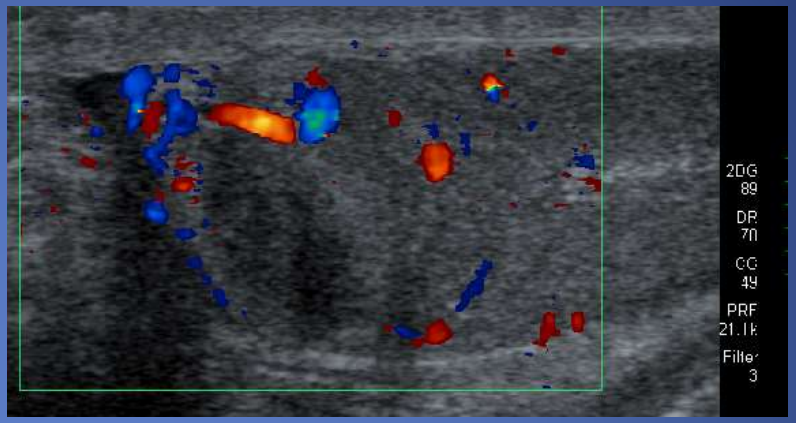


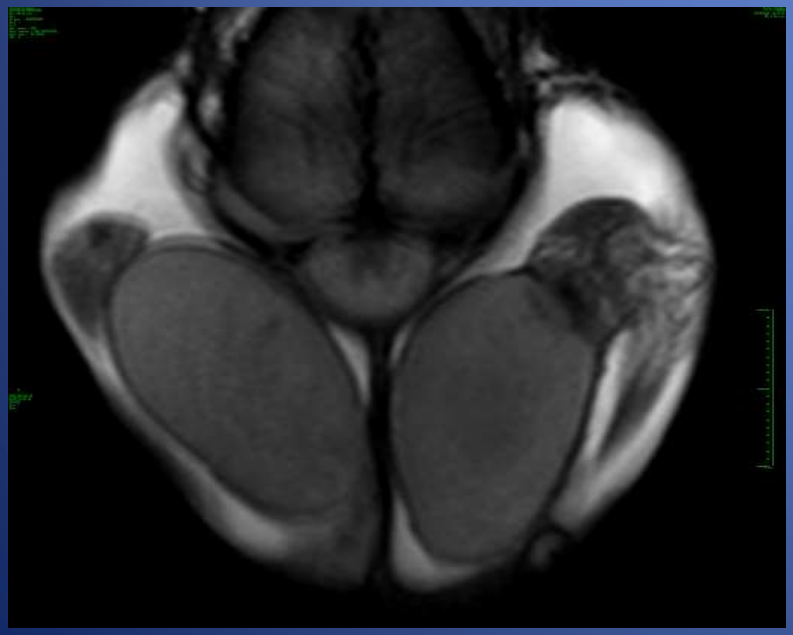
Cordon spermatique

Indications : où est la lesion ?



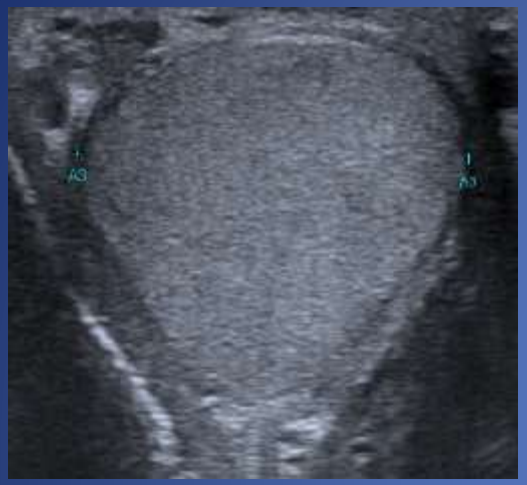
- proven adenomatoid tumor attached at the visceral layer of the tunica vaginalis





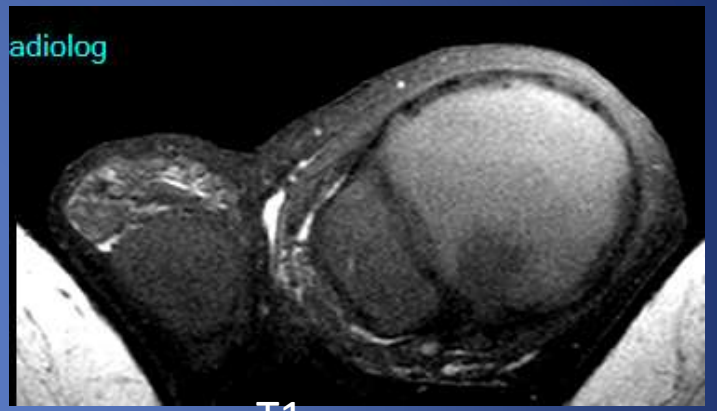
Epididymite chronique

Kystes scrotaux mimant 3ieme testicule

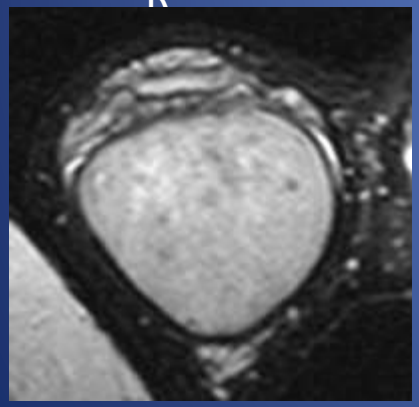


R

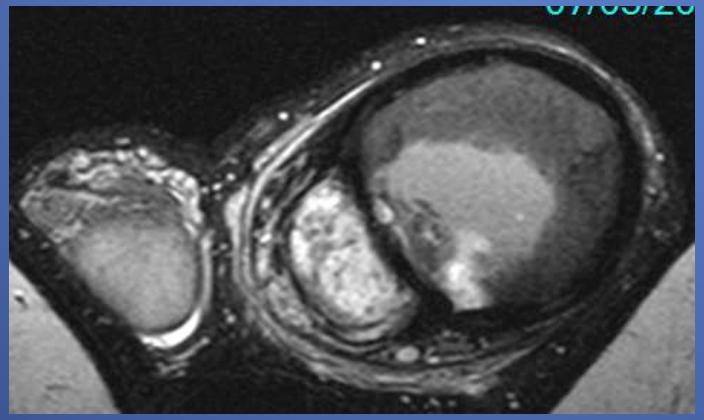
L



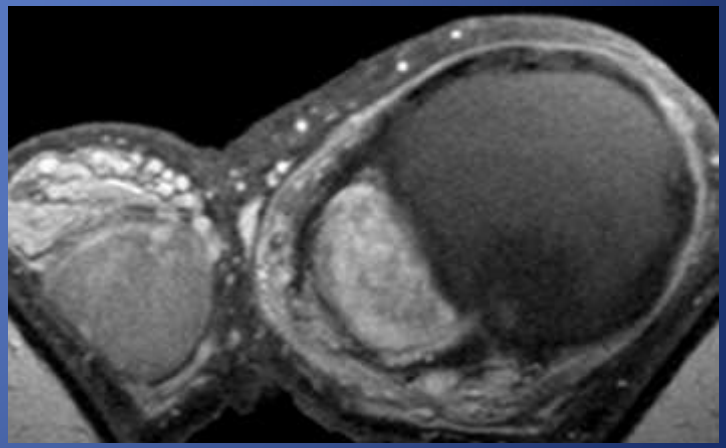
T1



T2



T2



T1 gado

Cyst , calcified borders, haemorrhage, and inflammation
Leydig cell hyperplasia (LT), repressing.

Malformations…. Génétiques ou non

Les abouchements ectopiques

- Défaut de séparation entre les uretères et les déférents.
- Déférents croises

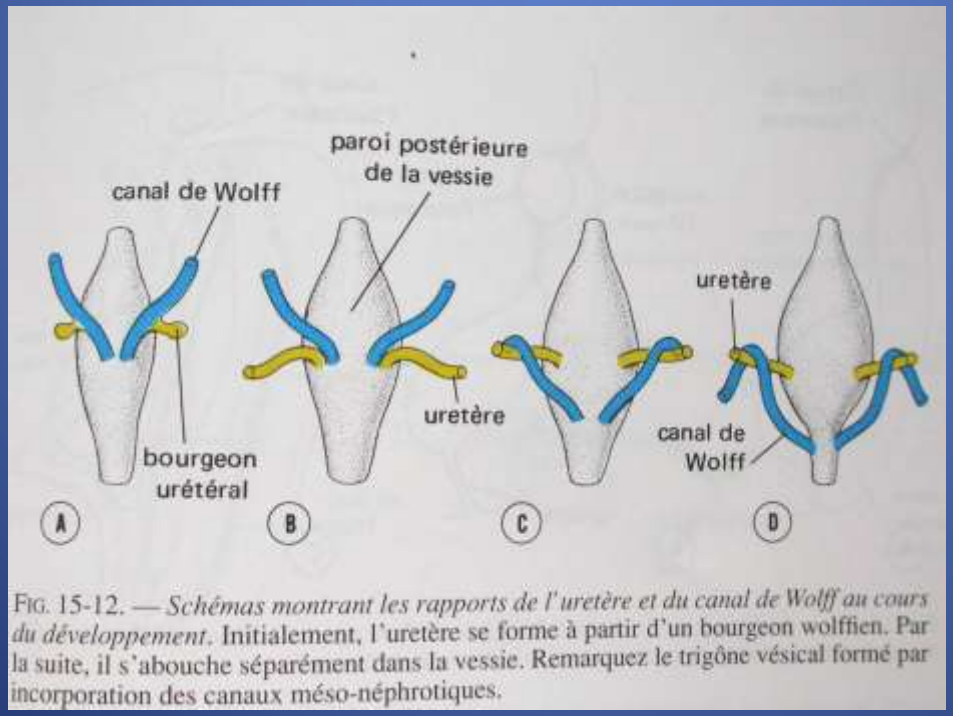
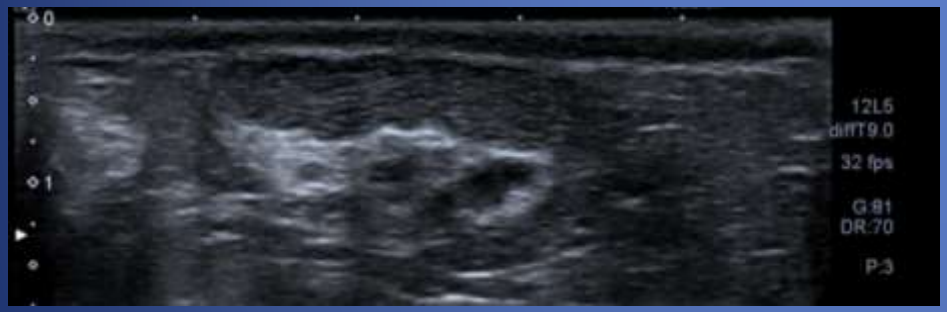
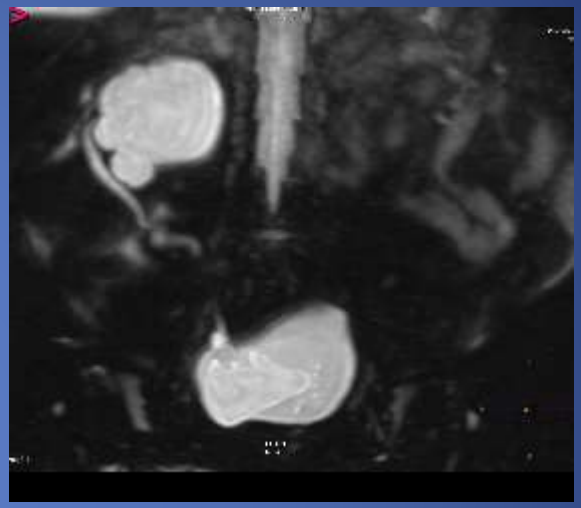
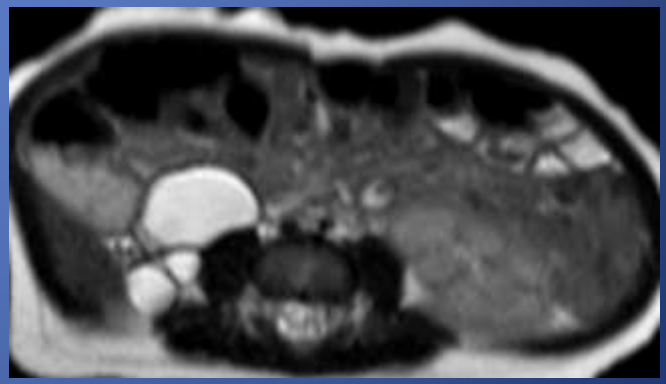


FIG. 15-12. — *Schémas montrant les rapports de l'uretère et du canal de Wolff au cours du développement*. Initialement, l'uretère se forme à partir d'un bourgeon wolffien. Par la suite, il s'abouche séparément dans la vessie. Remarquez le trigône vésical formé par incorporation des canaux méso-néphrotiques.

5 ans avis sur nodule testiculaire

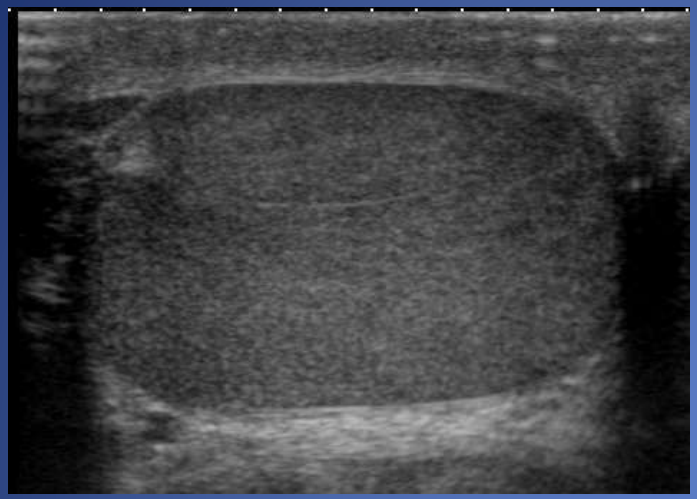


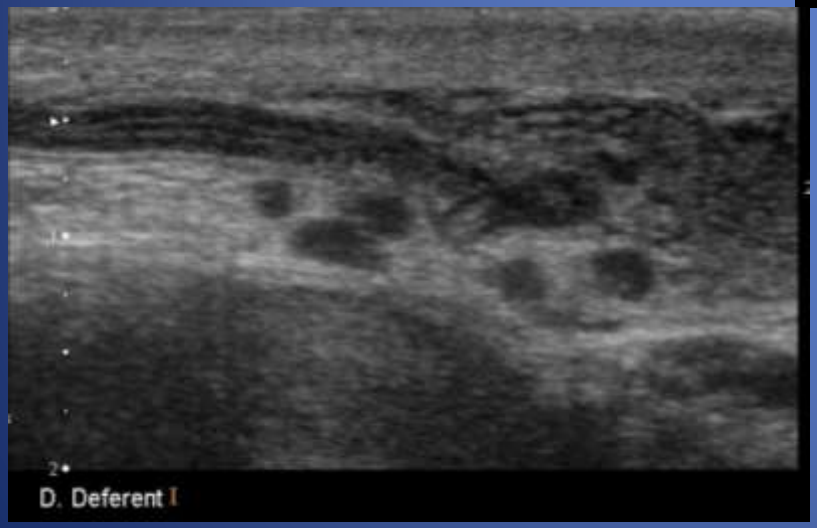


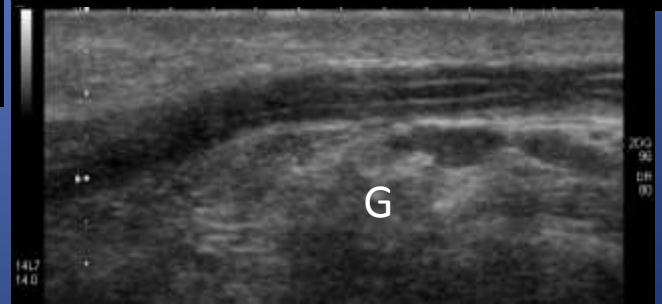


IRM en 2008

18 ans, Rein droit unique connu depuis la naissance
Douleur à l'éjaculation depuis quelques années







D

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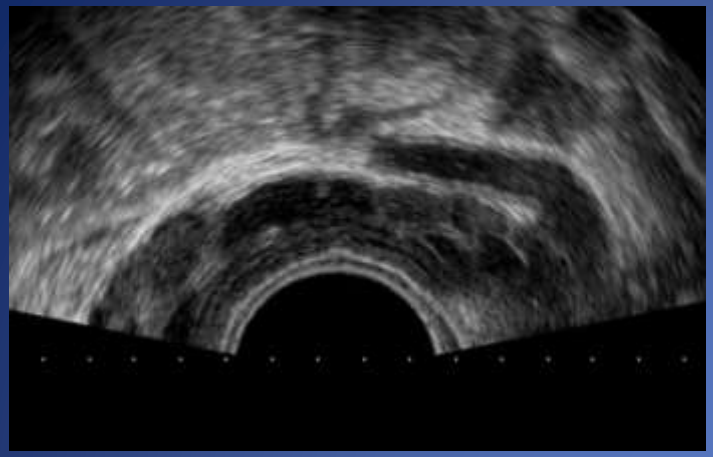

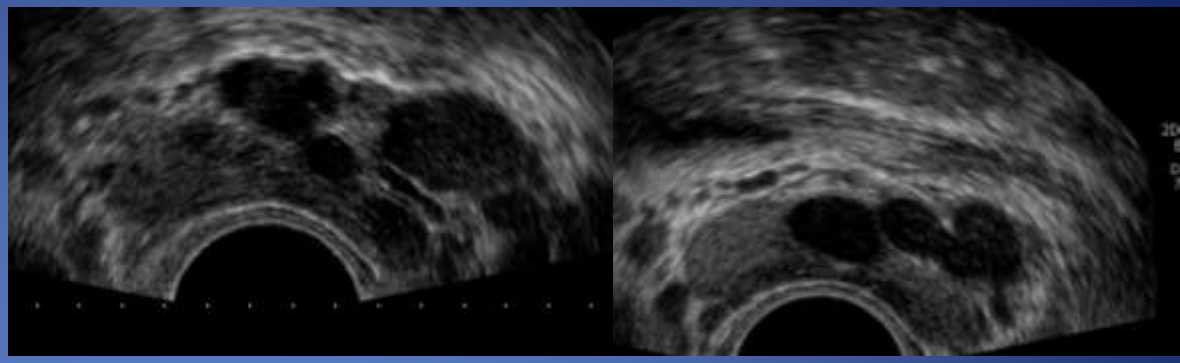

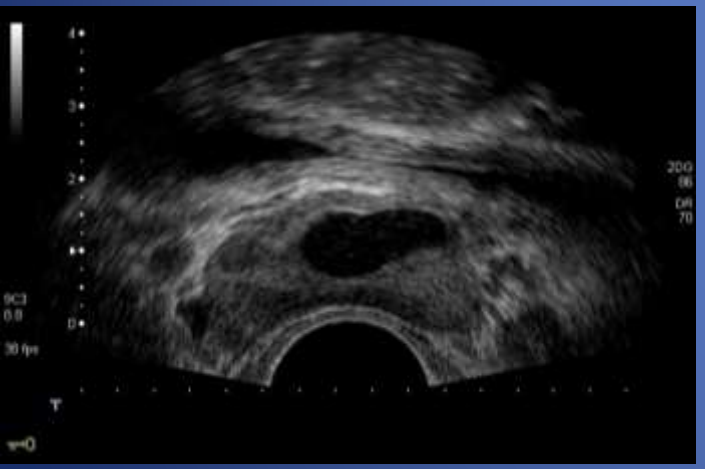

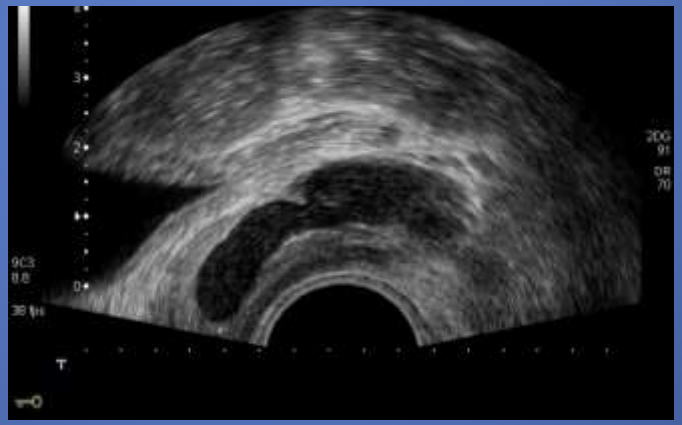

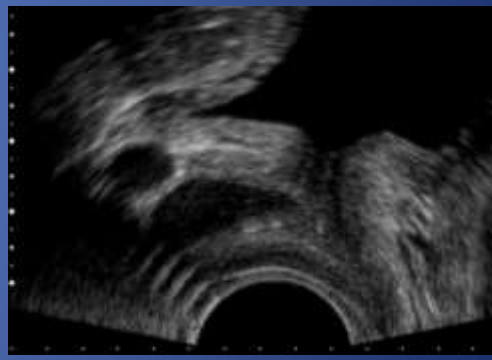

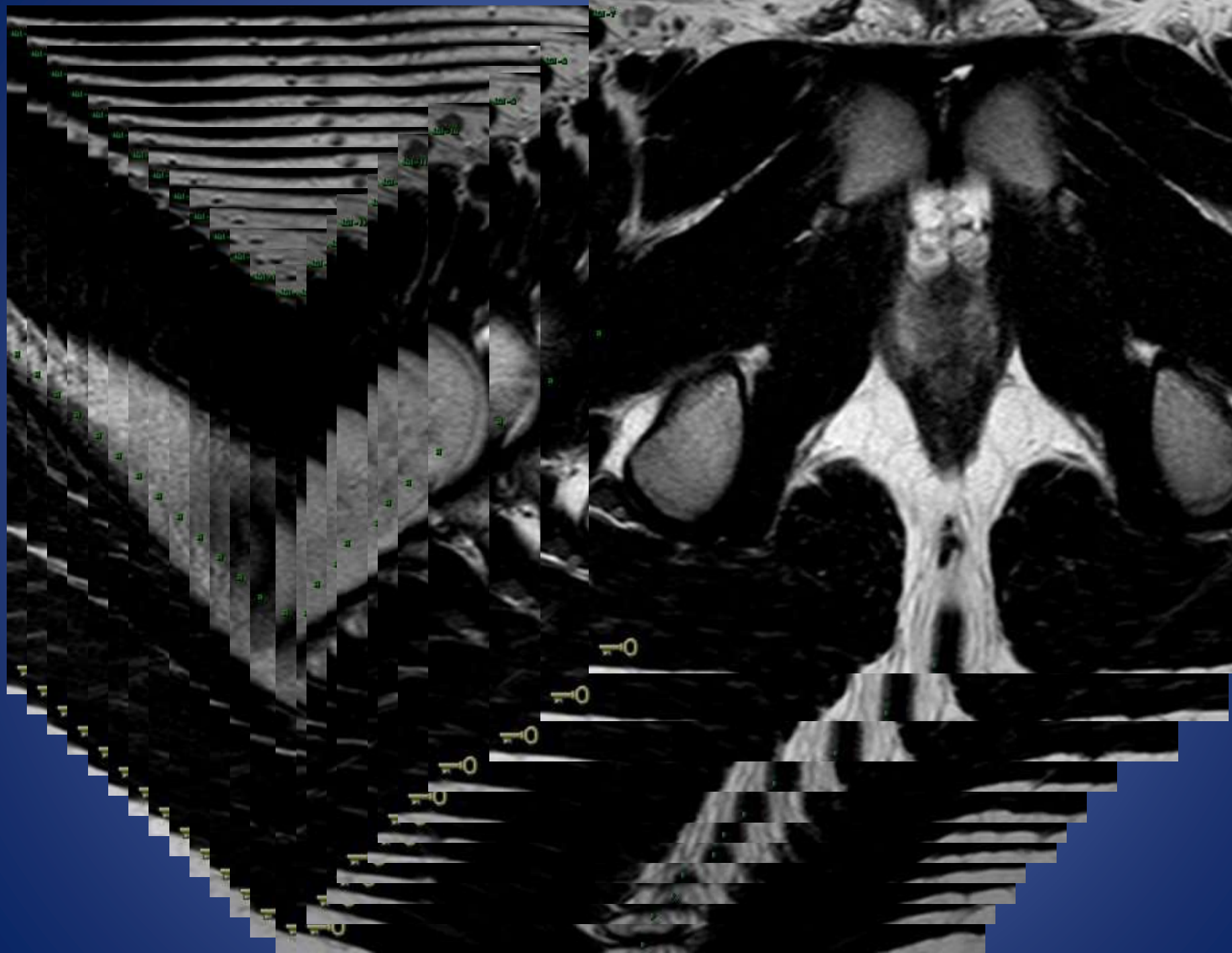

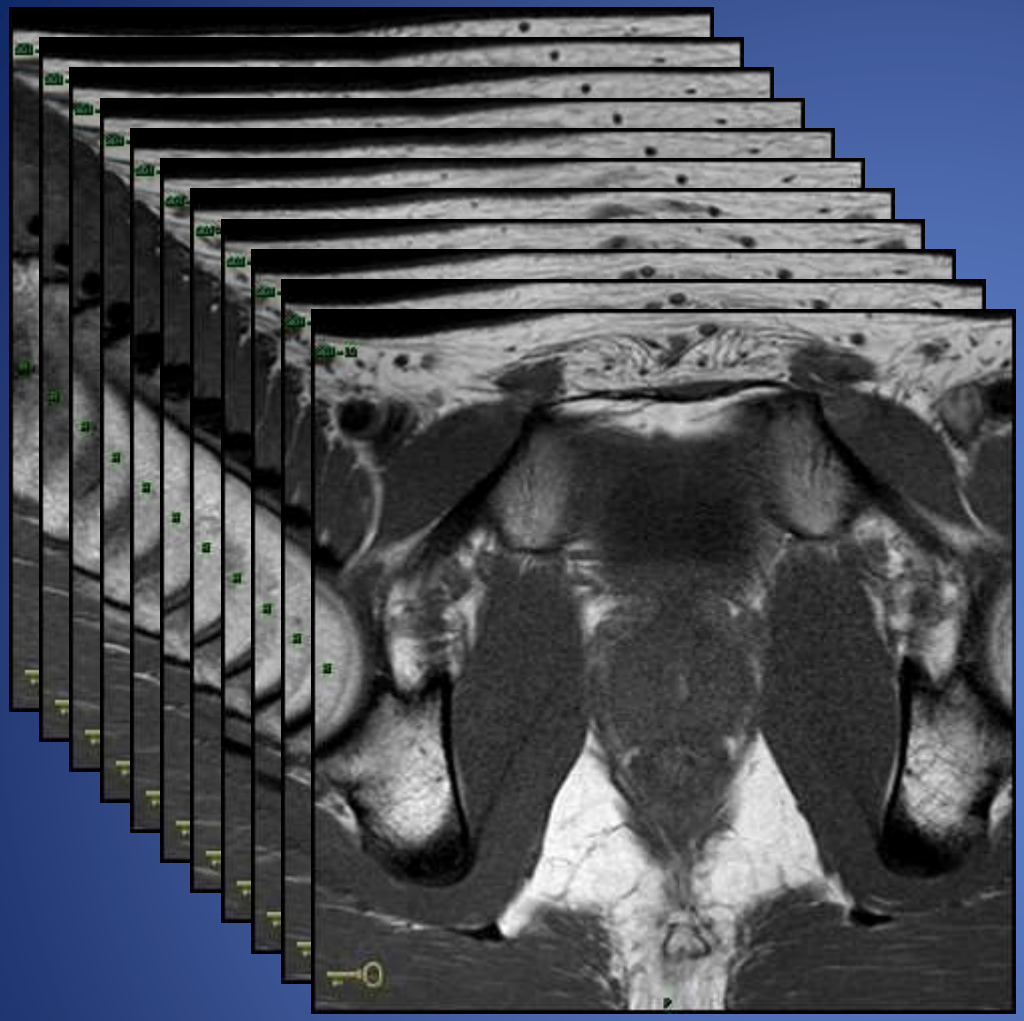

reliquat mullerien persistant

- Jeune homme de 31ans
- ATCD de tumeur testiculaire gauche traité par orchidectomie , curage, radiothérapie et chimiothérapie
- Bilan de surveillance : TDM et IRM

Remerciement au Dr Balleyguier, IGR, Villejuif


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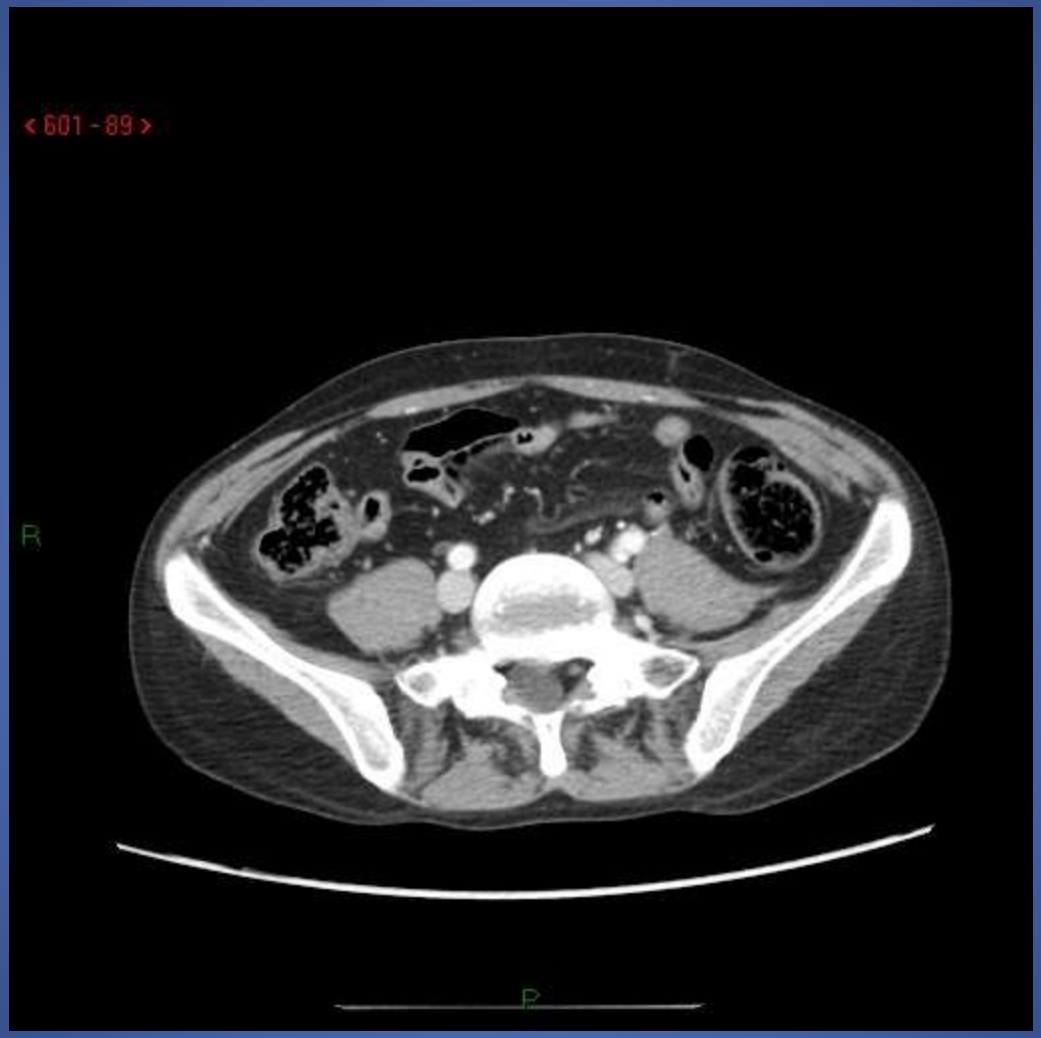
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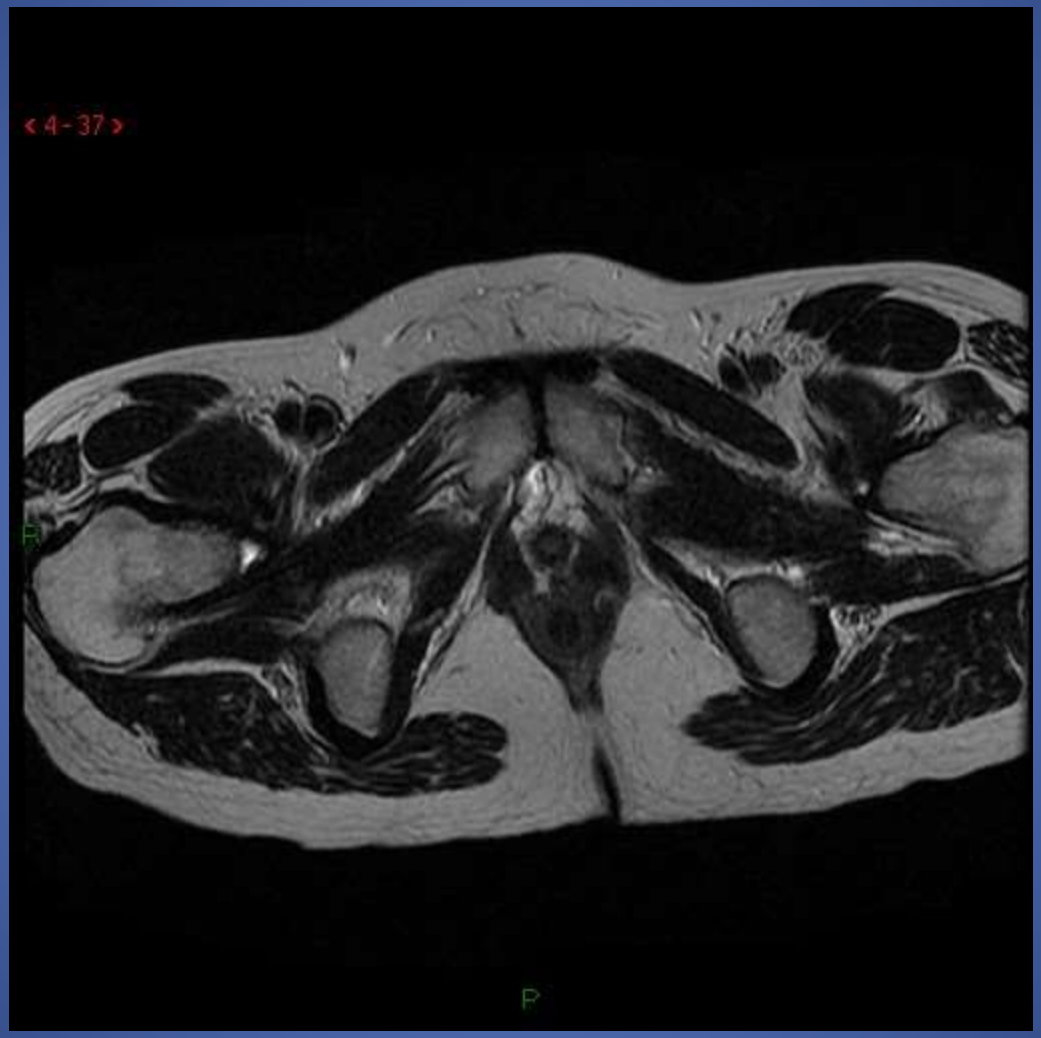
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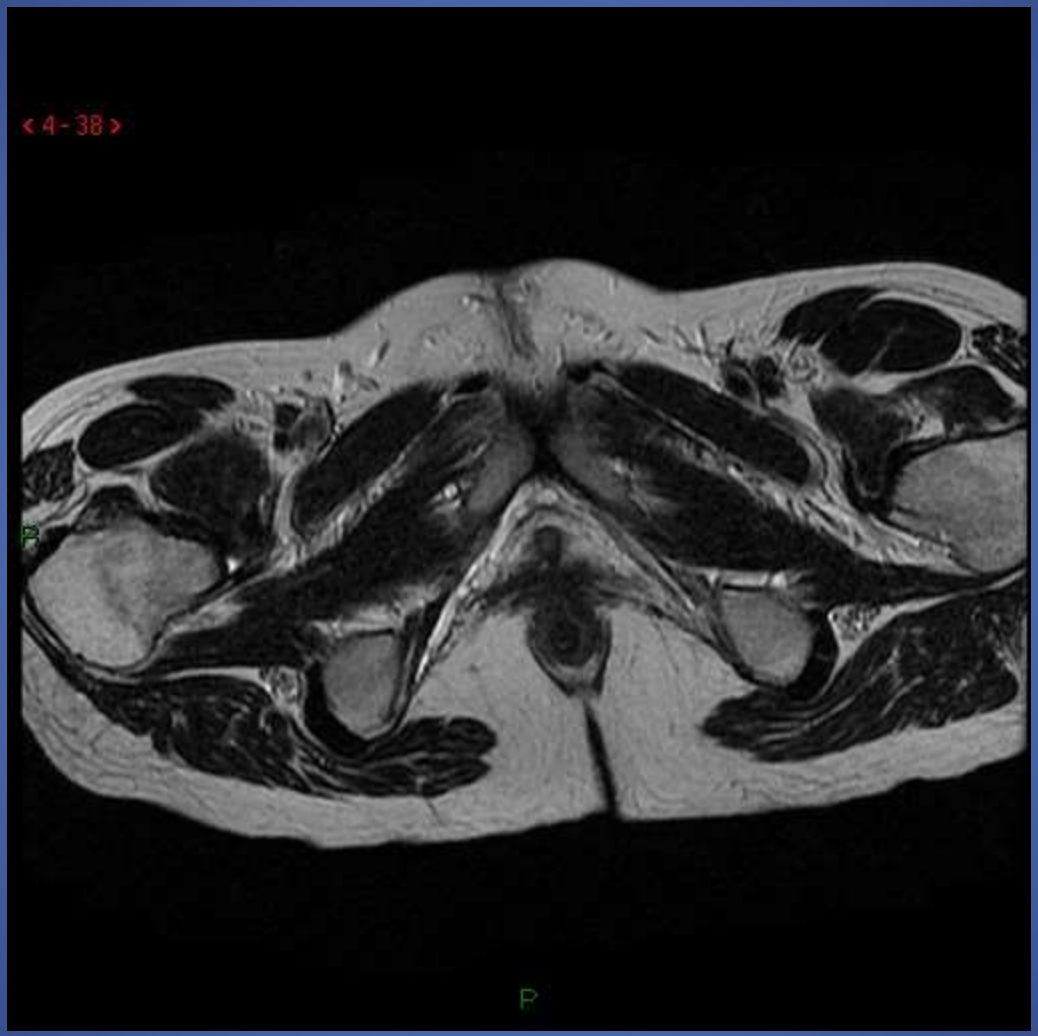
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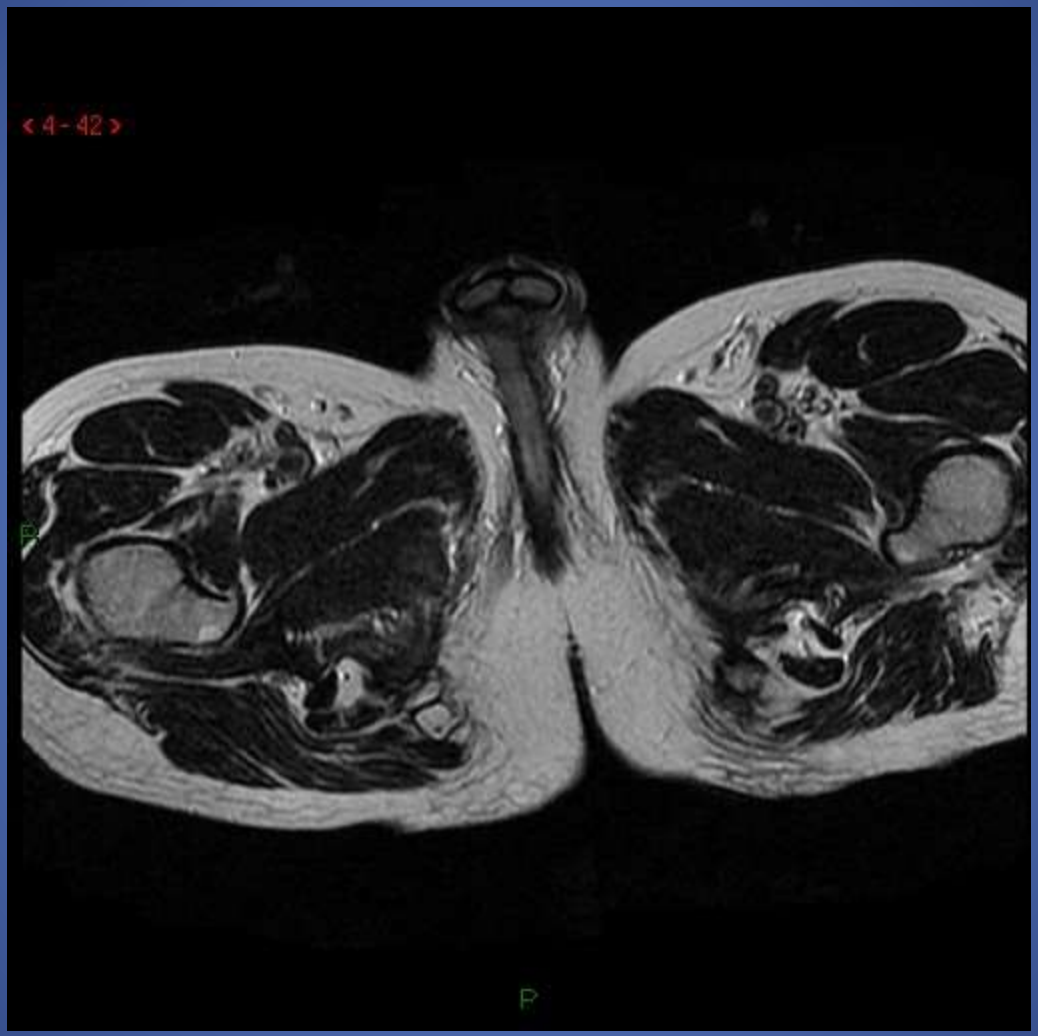
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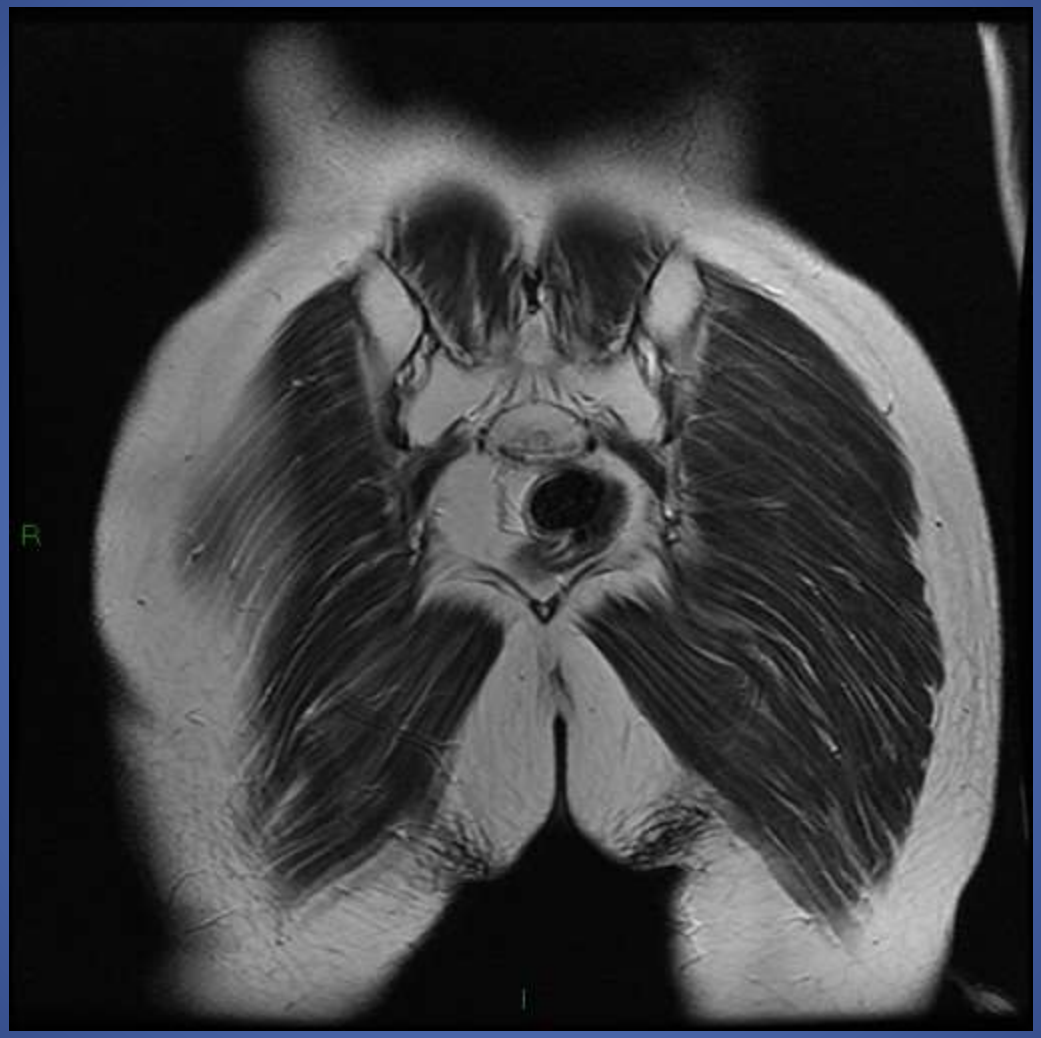
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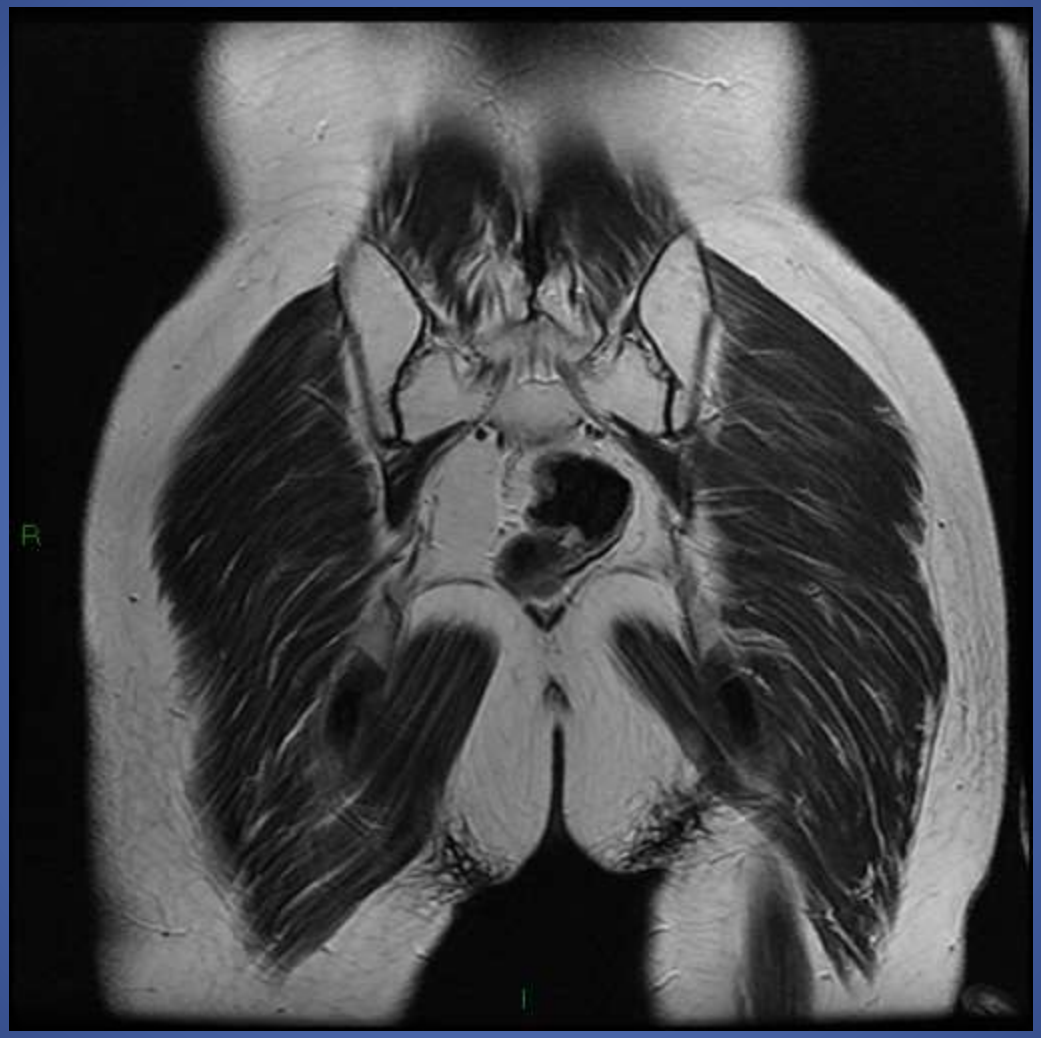
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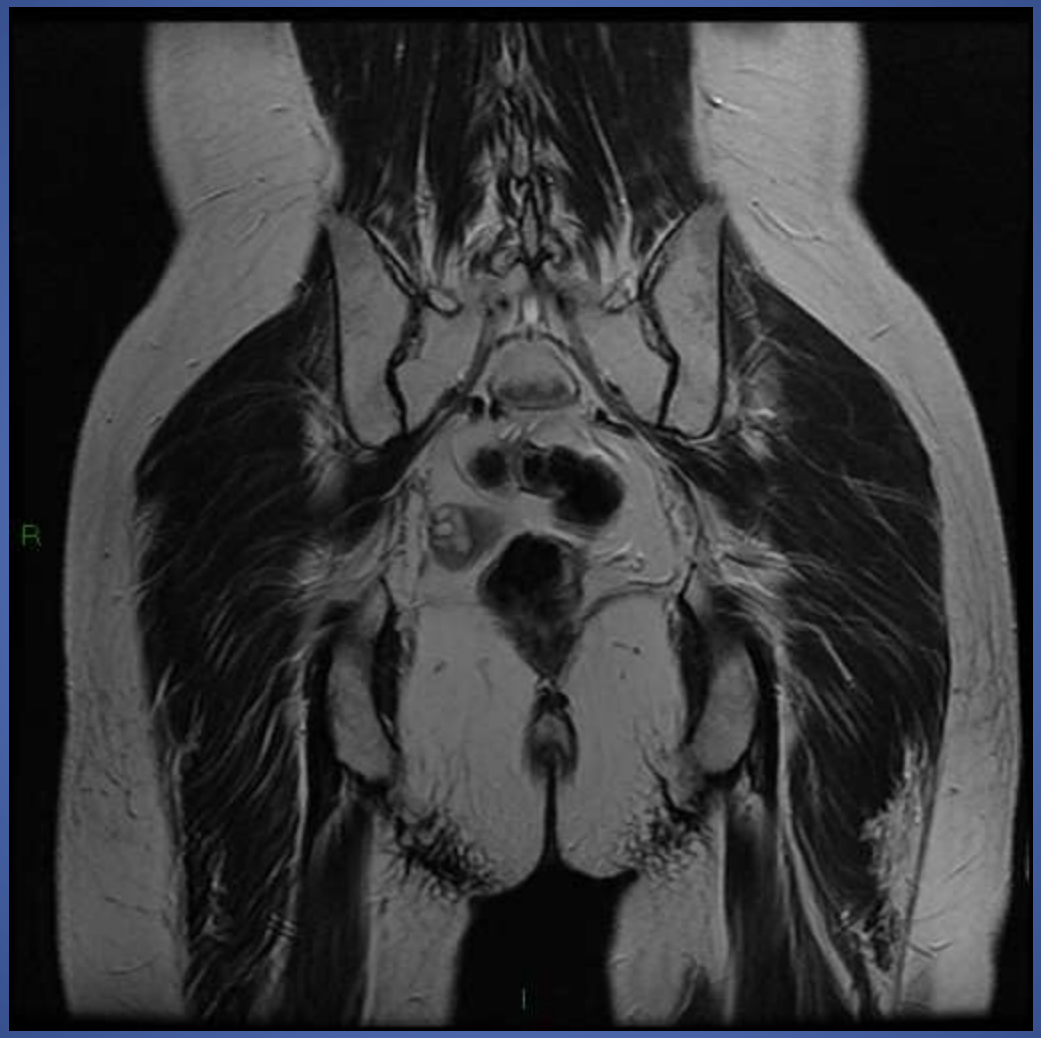
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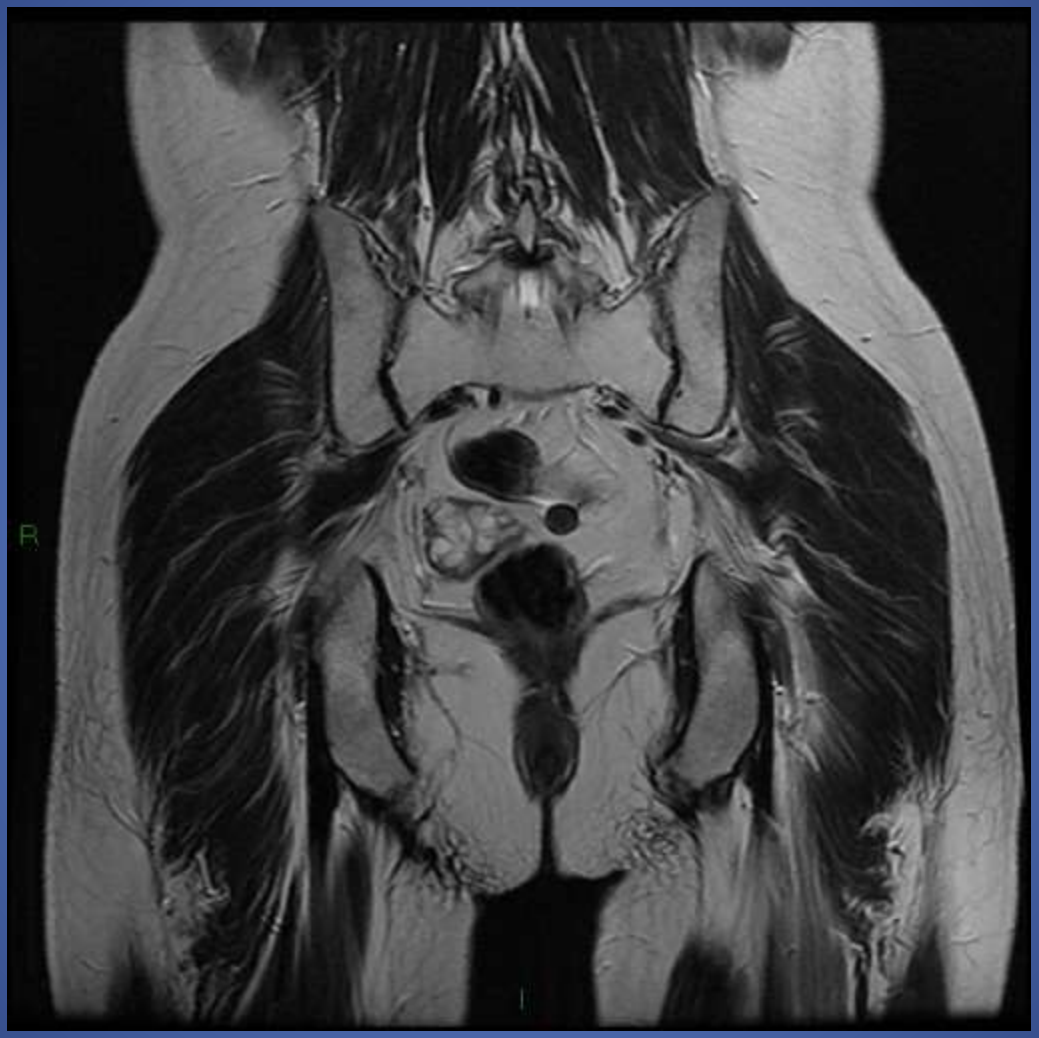
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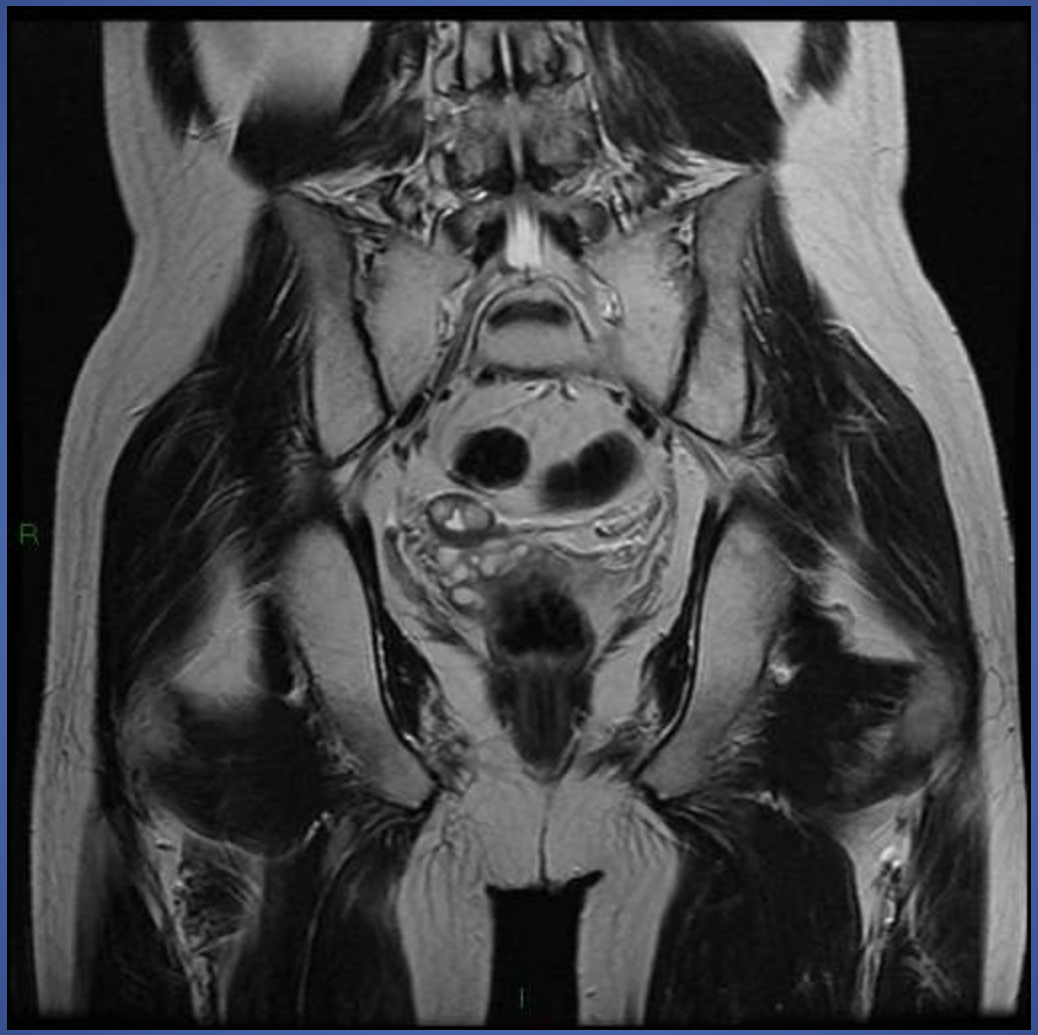
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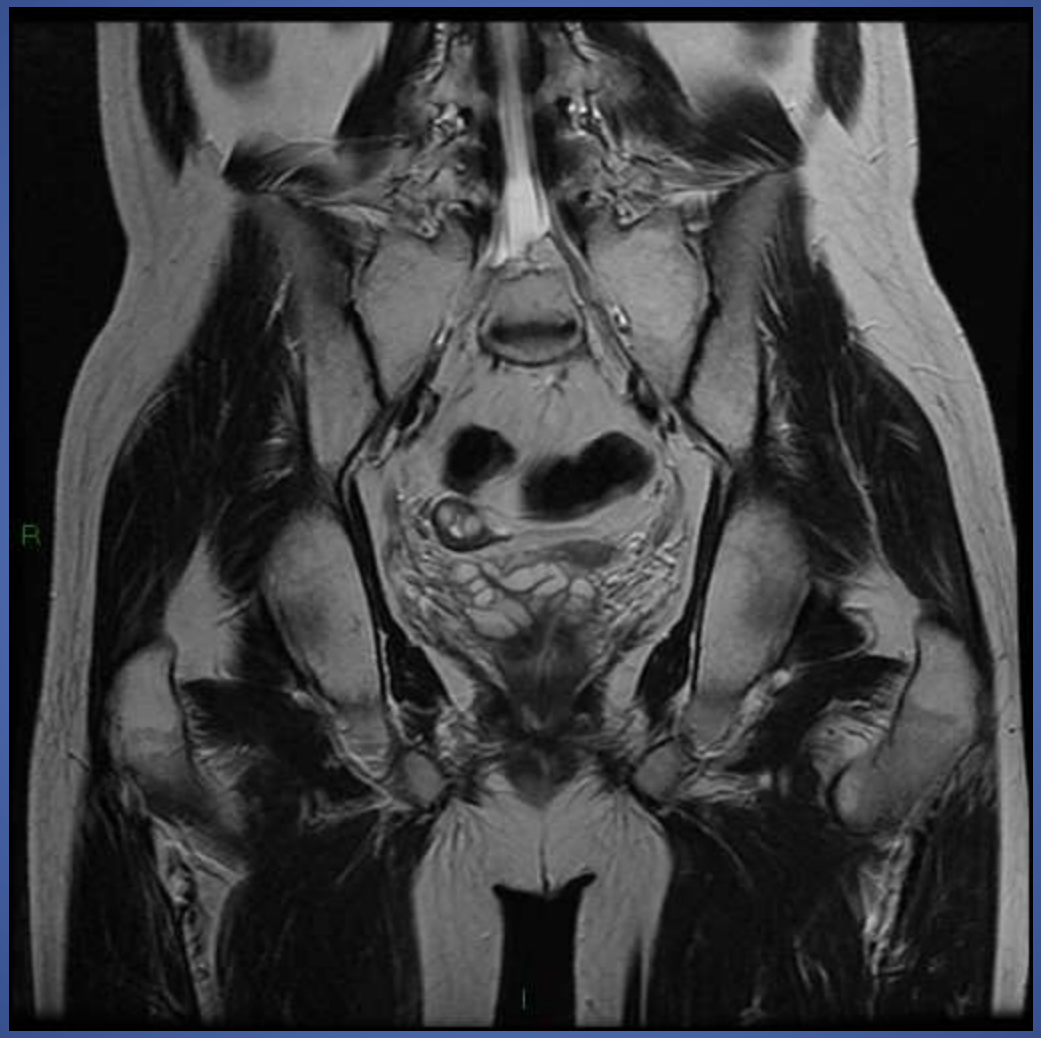
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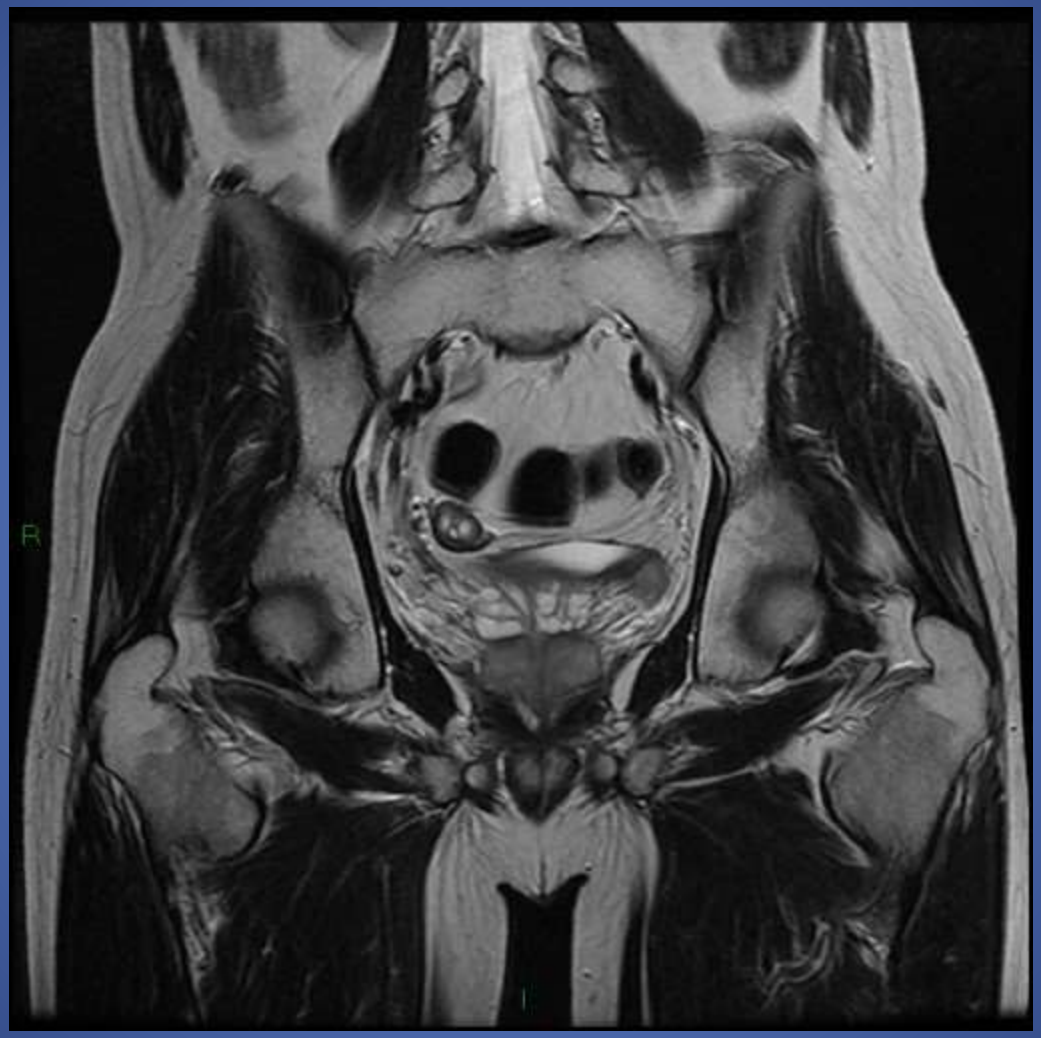
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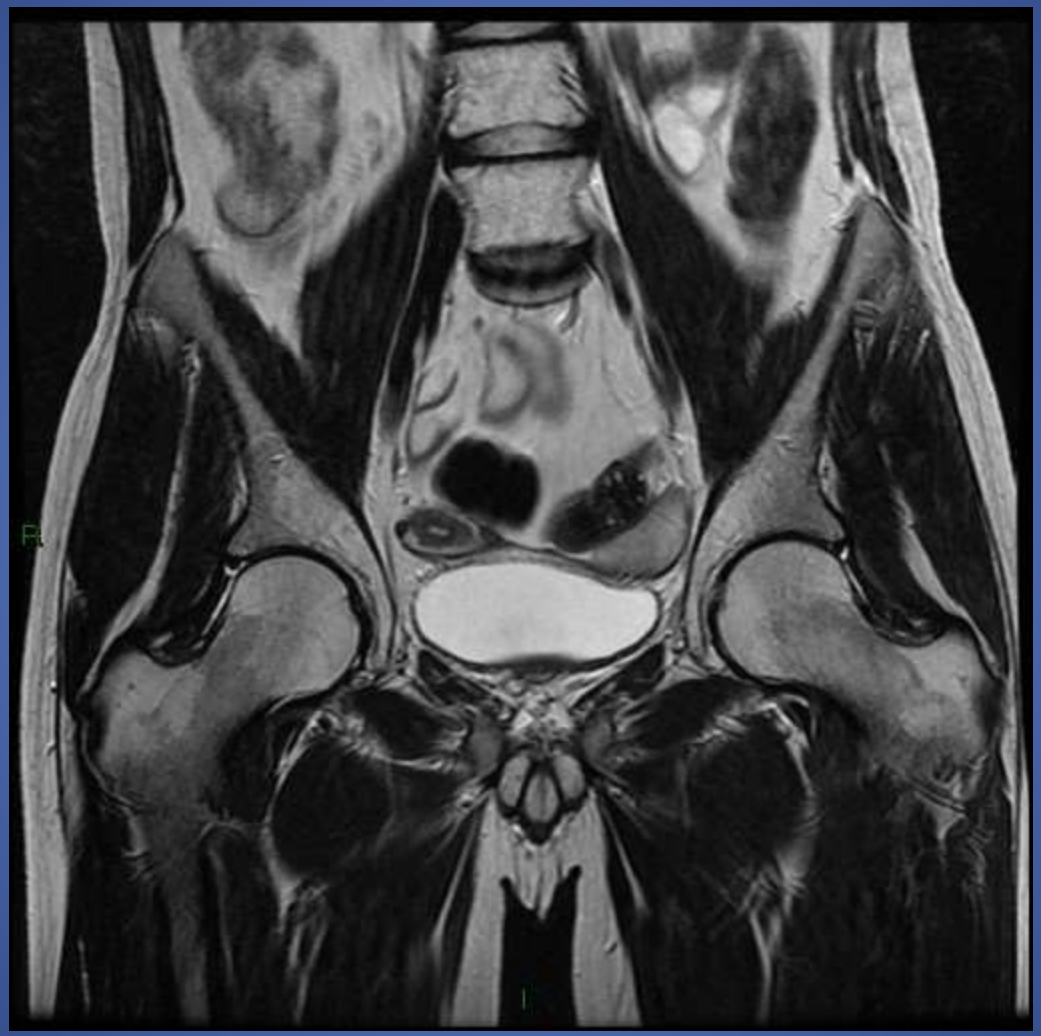
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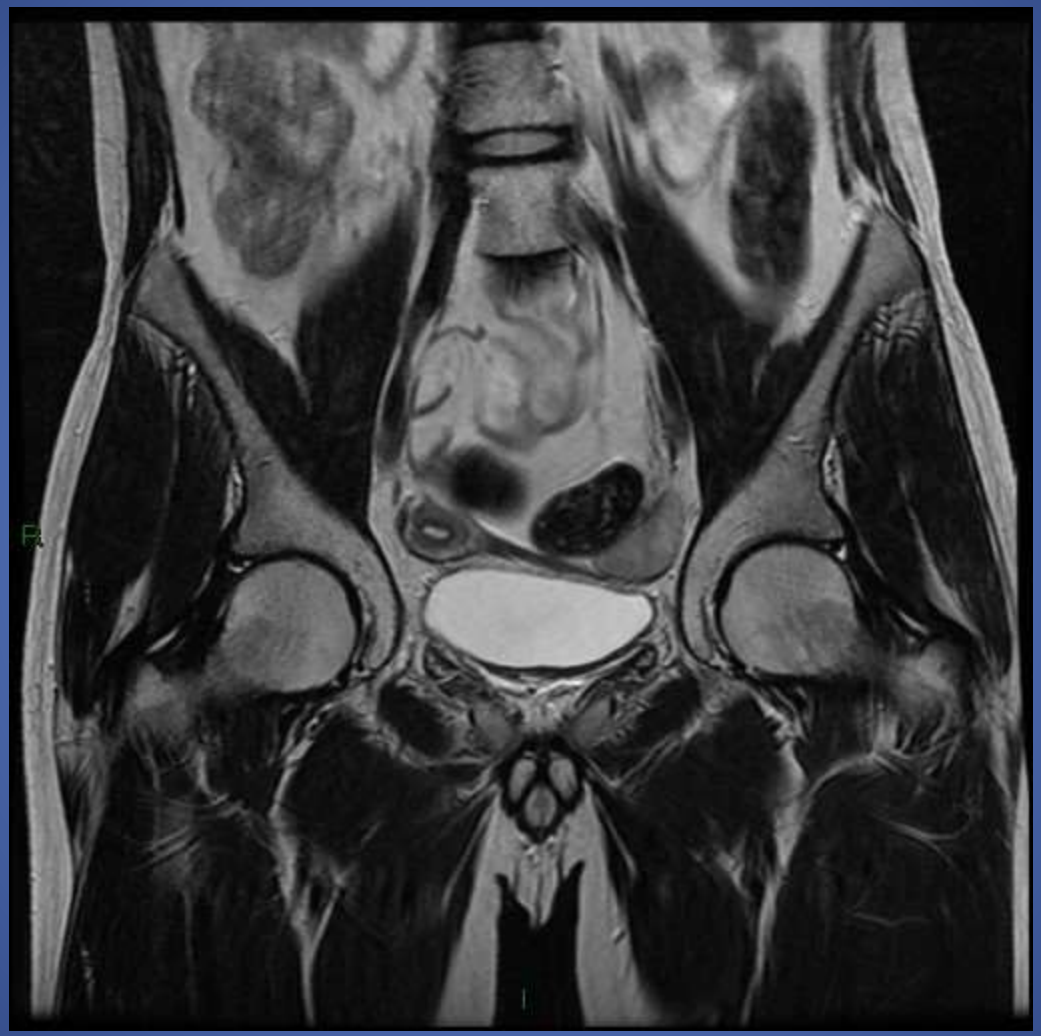

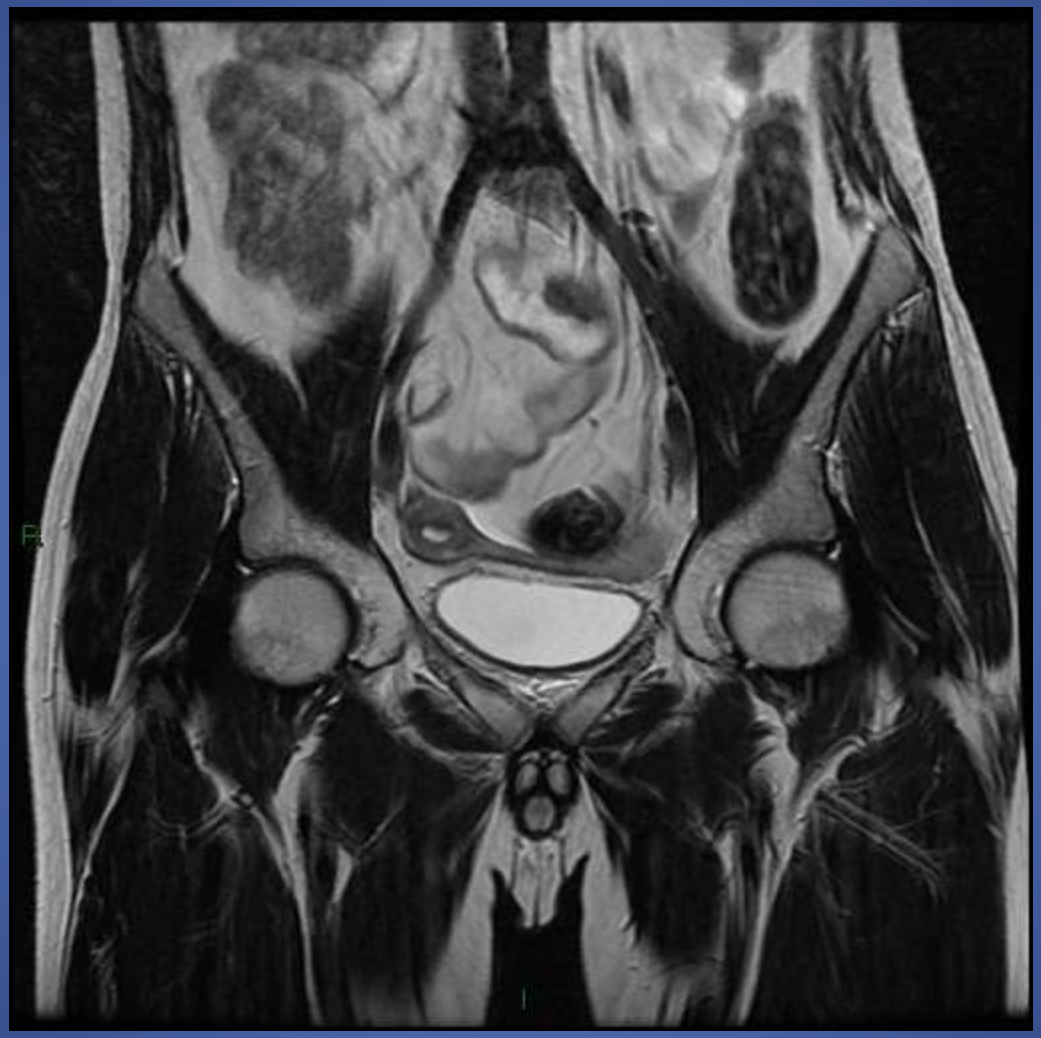
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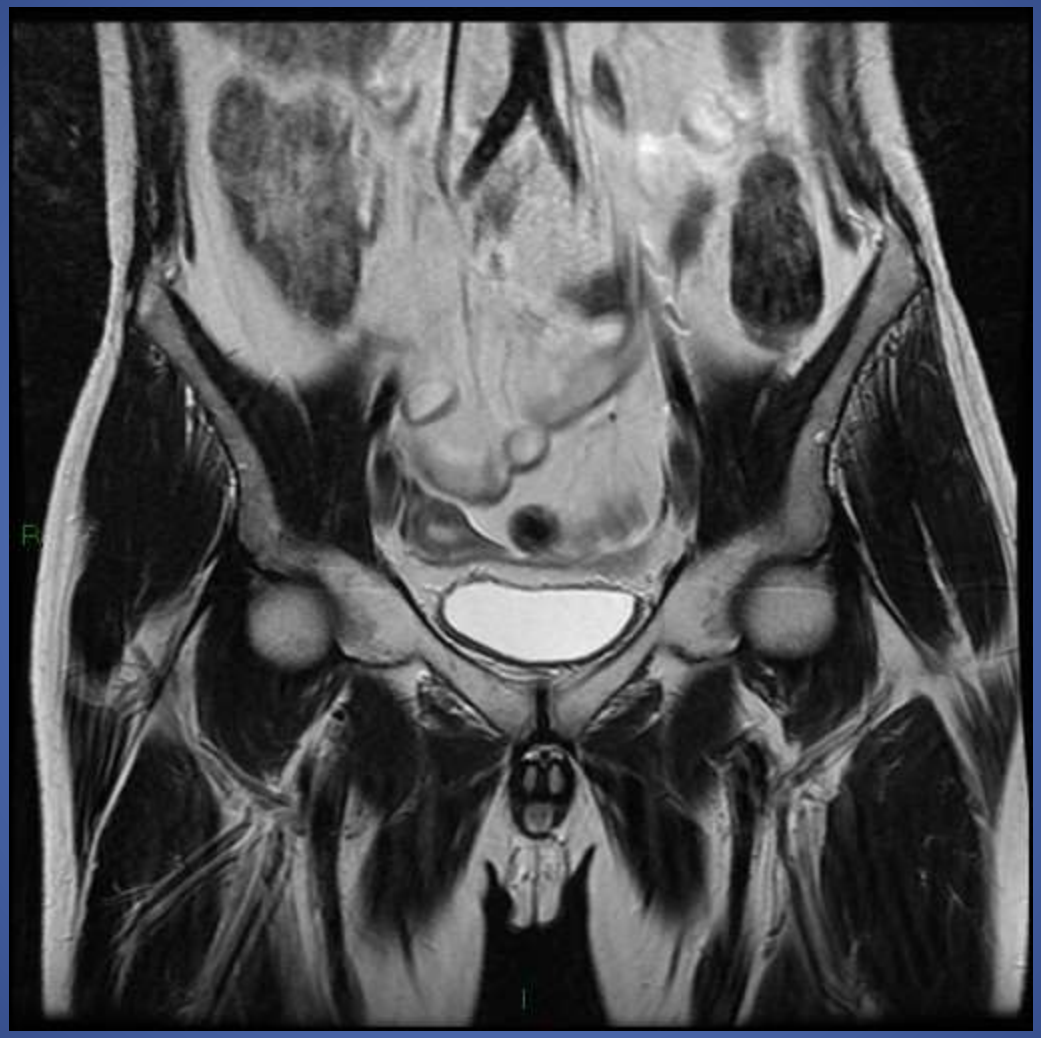

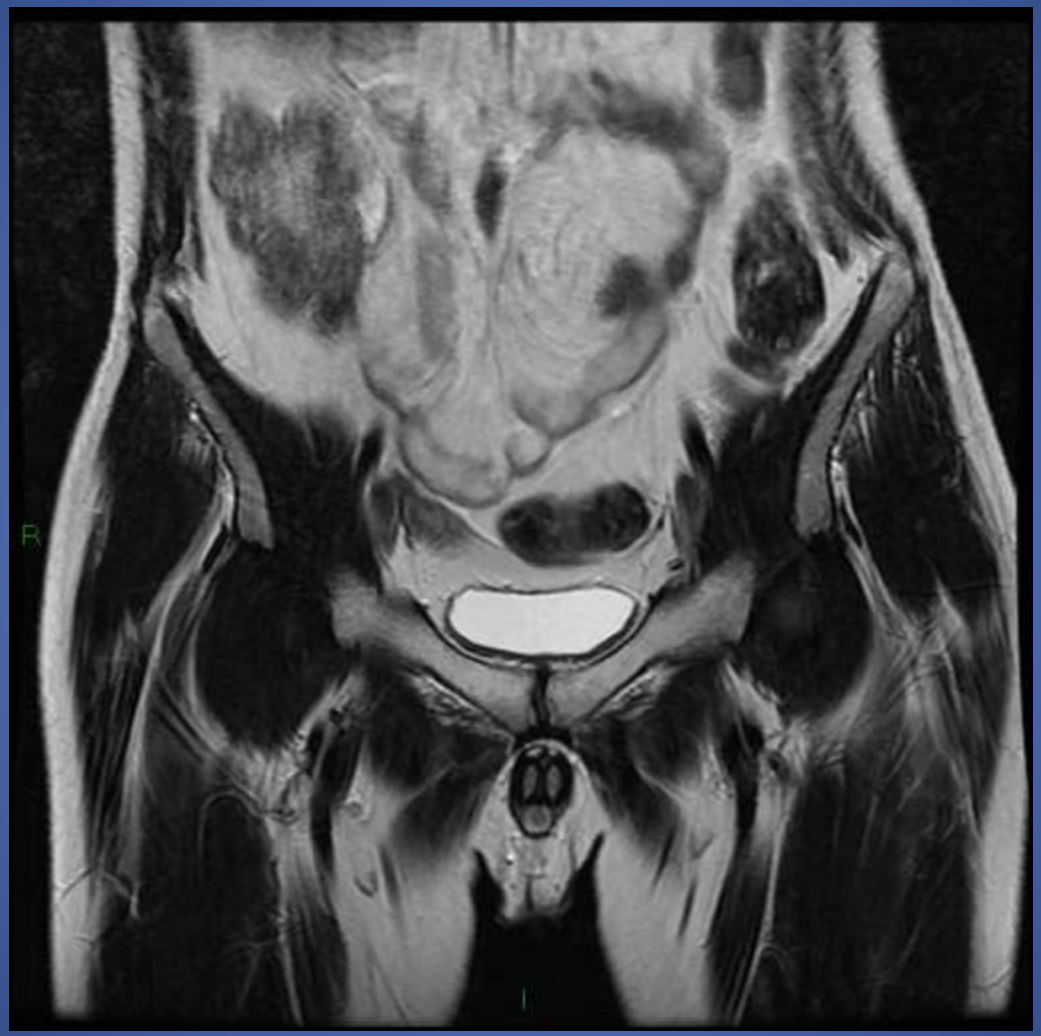
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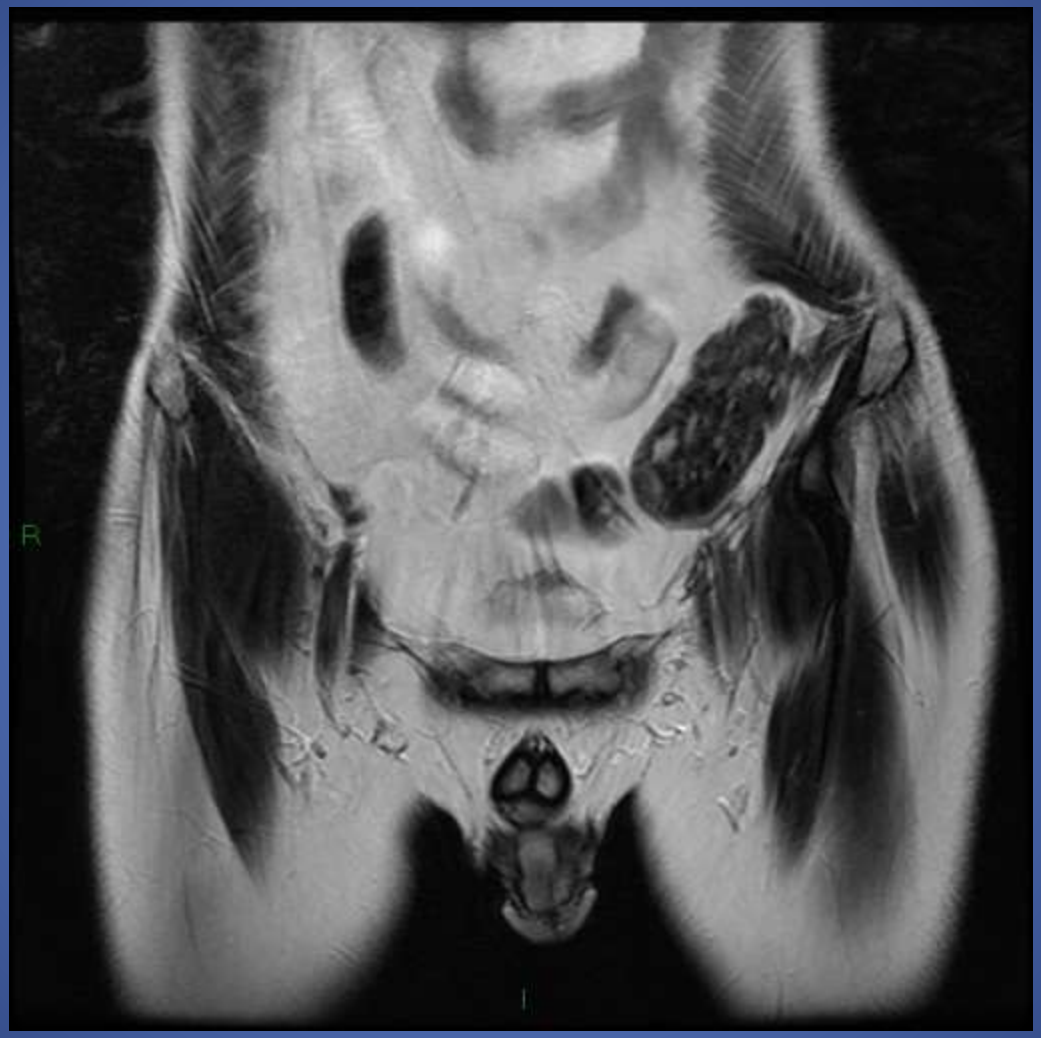
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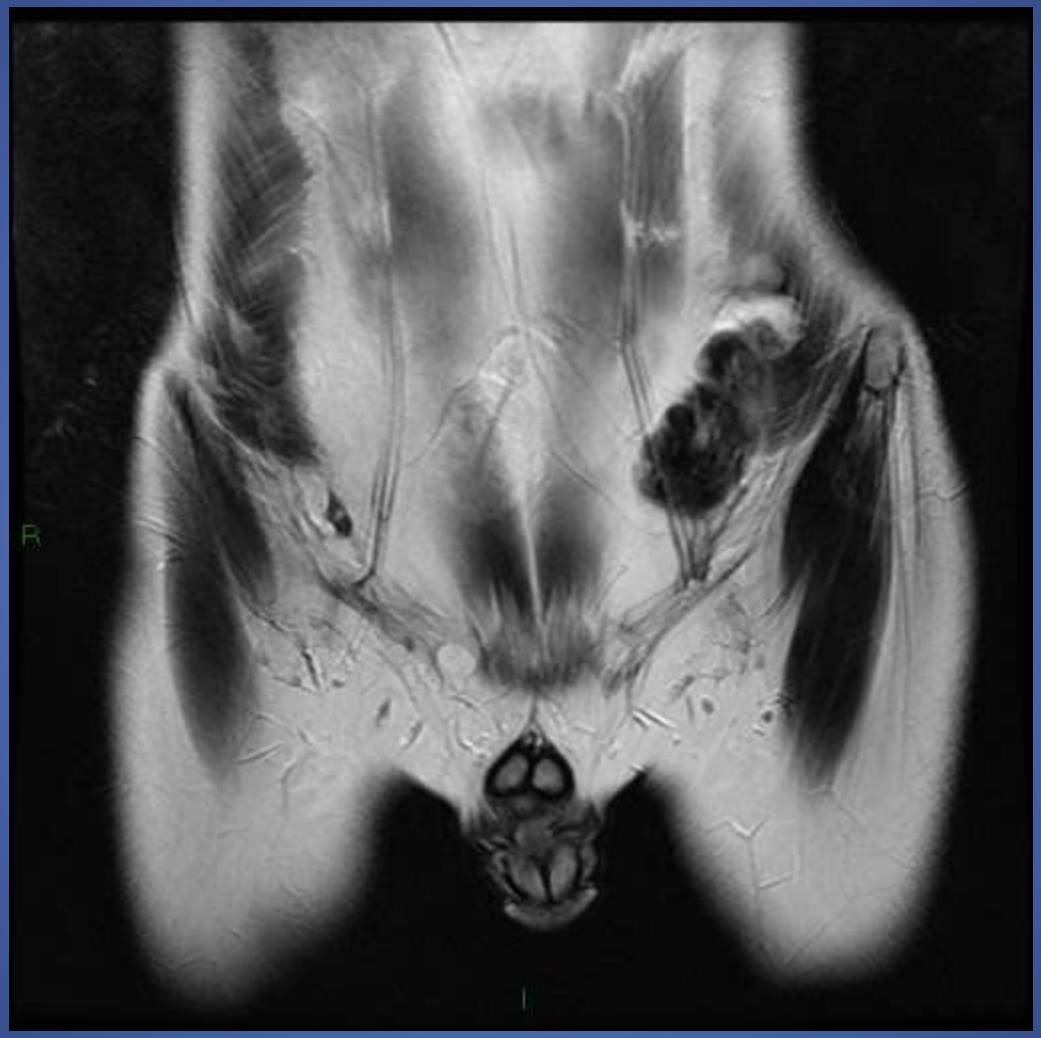
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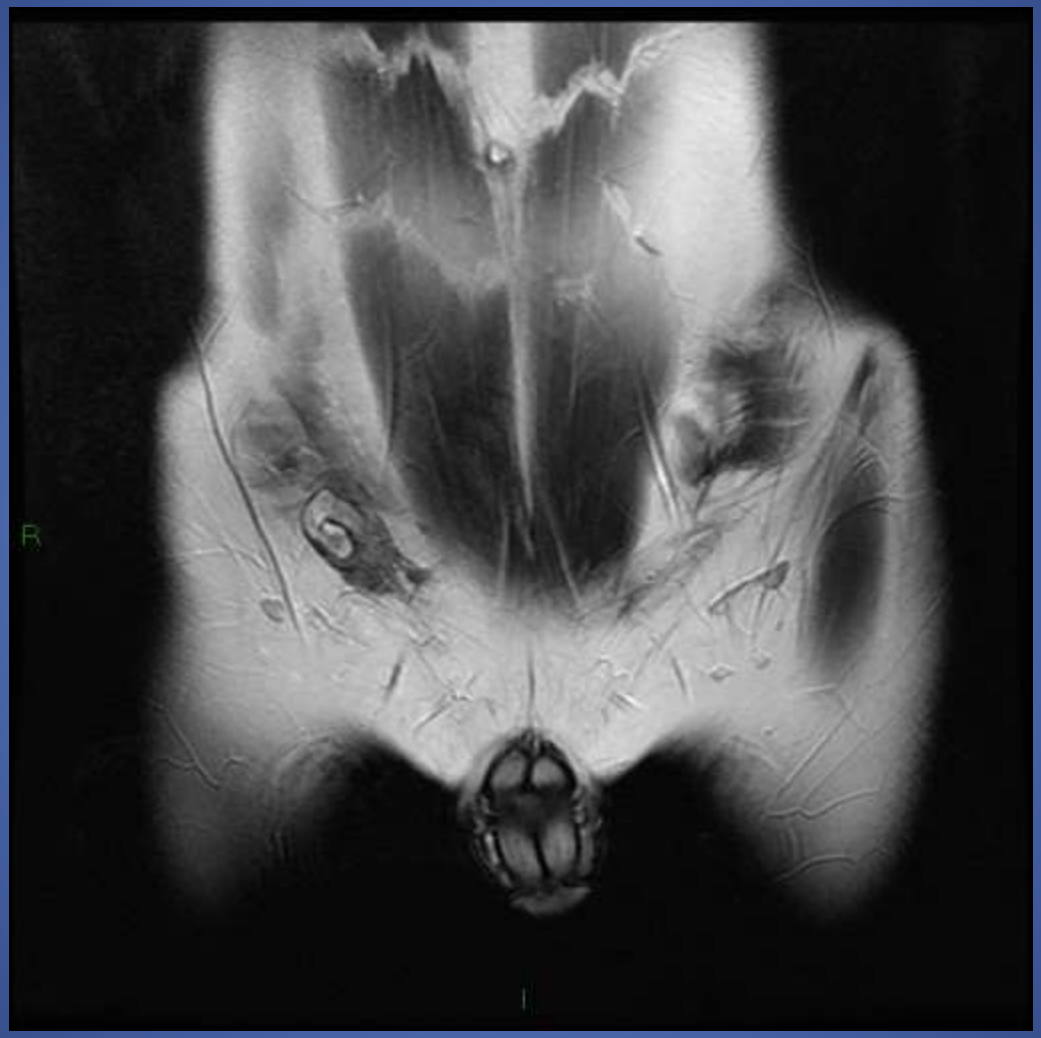
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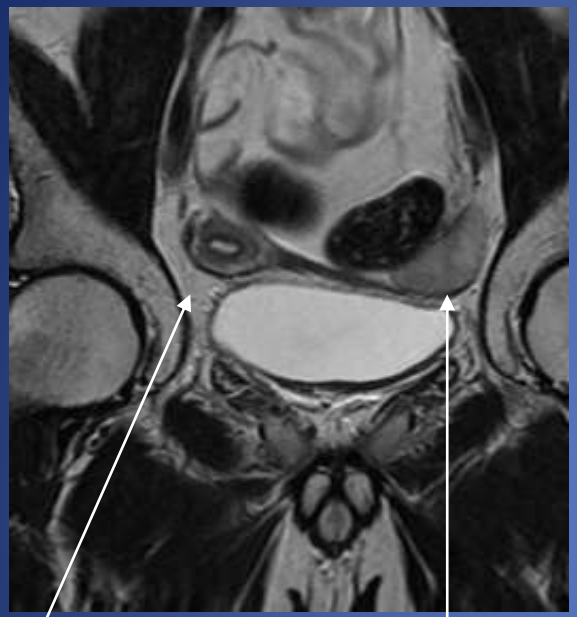
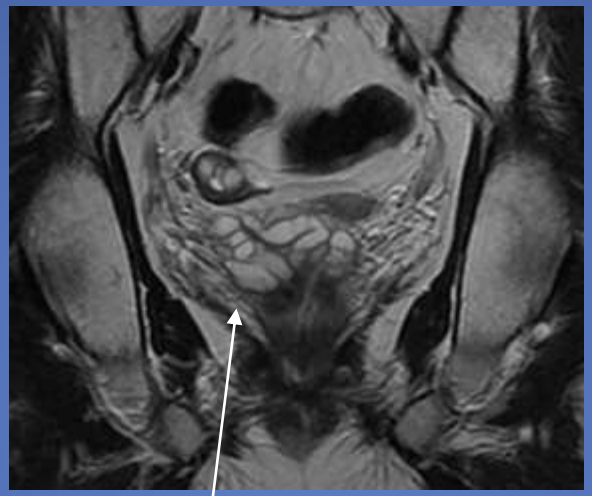
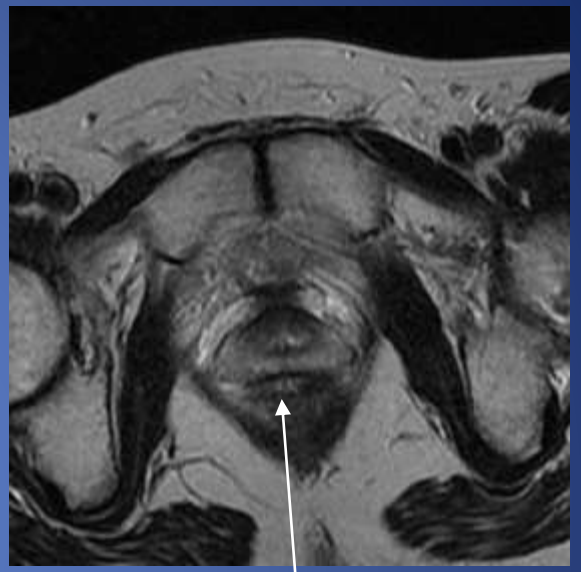


Reliquat mulerien

« corne G »
Ou trompe



Vésicule séminale
Dans le prolongement
Du reliquat



prostate

Imagerie de la verge:

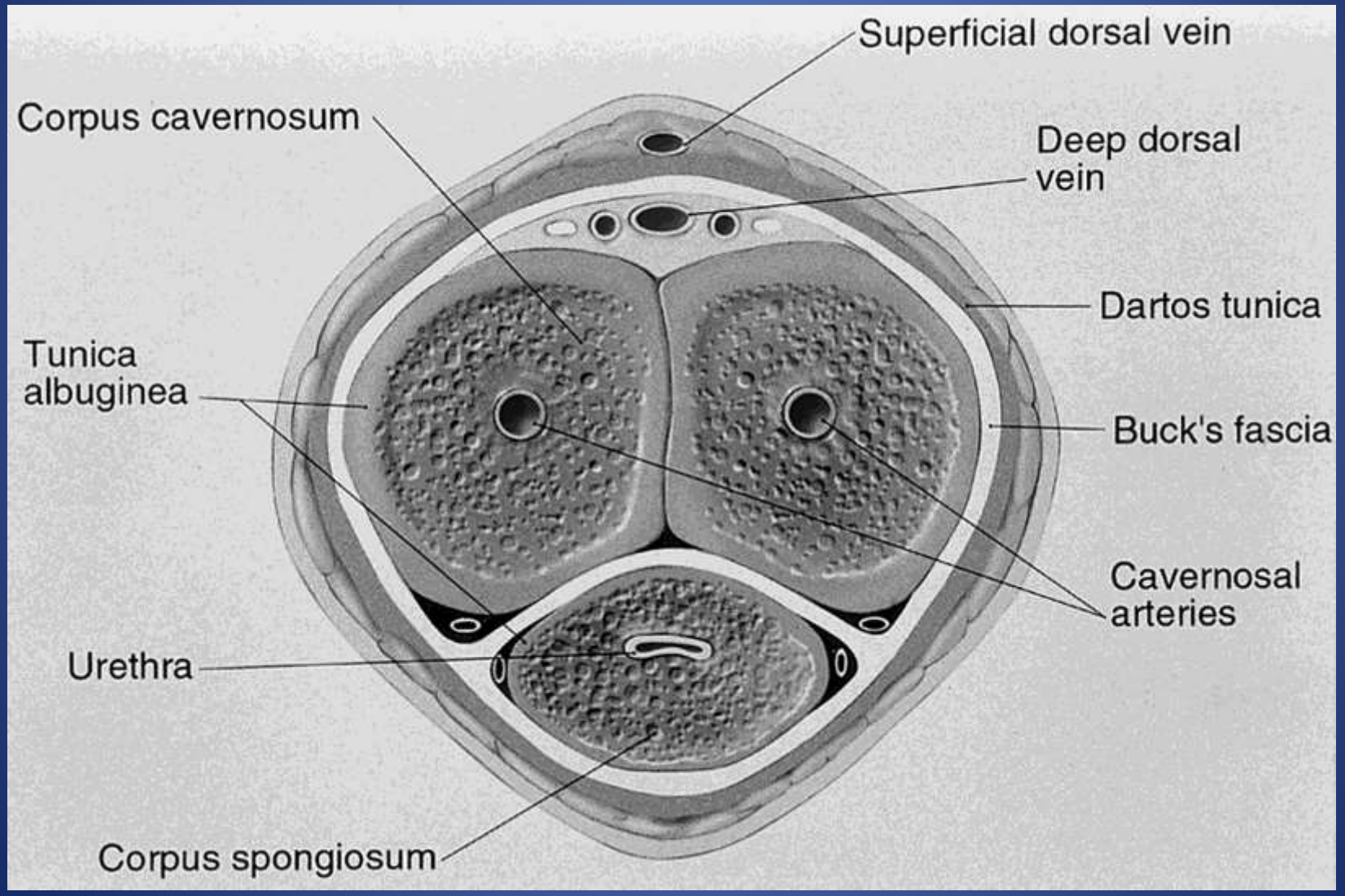
Indications

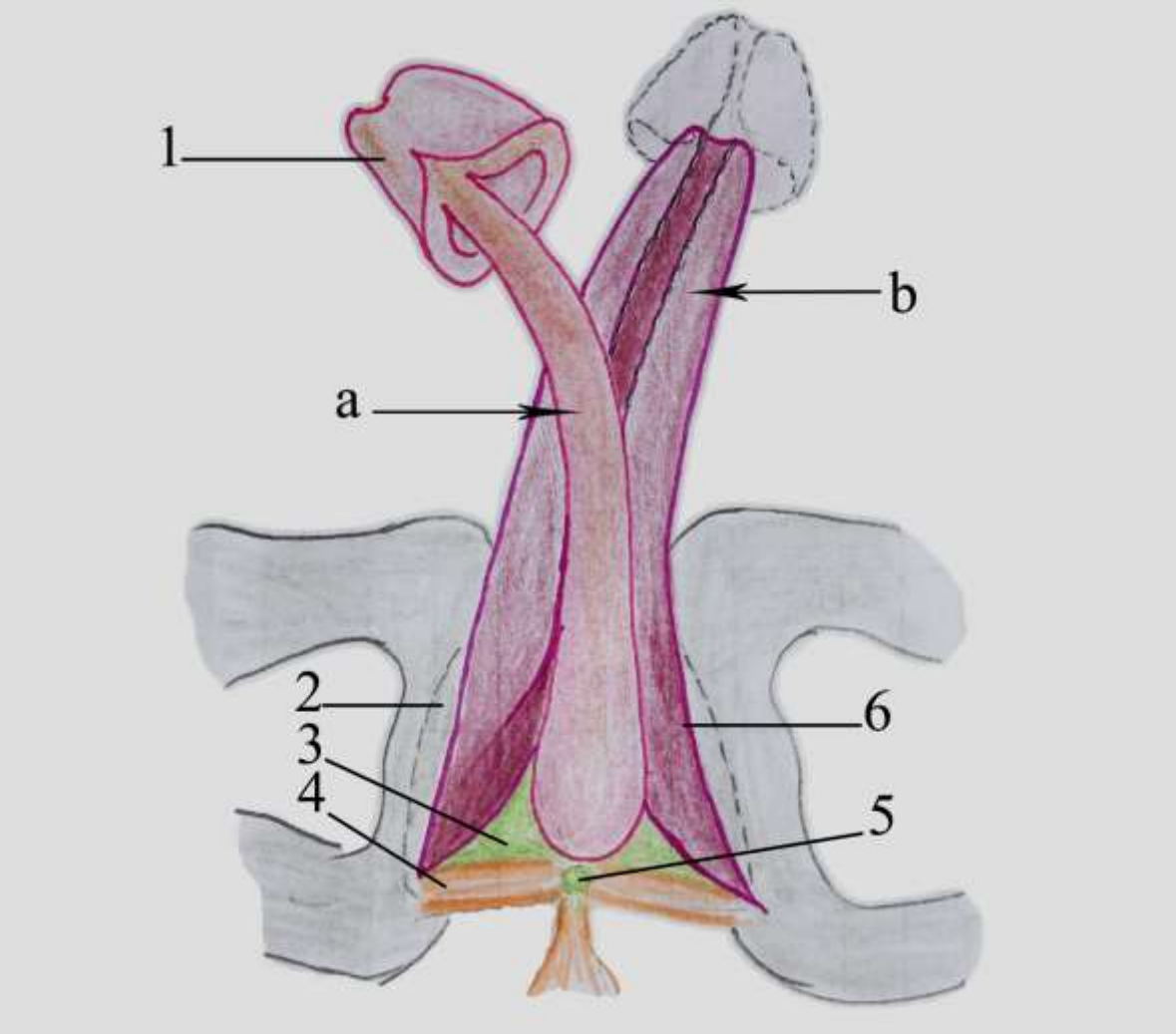
- Traumatismes : coup de pied, AVP, chute à califourchon, faux pas du coït.
- Douleur
- Masse palpable ou visible (gland)
- Coudure à l'érection
- Dysfonction érectile

Techniques

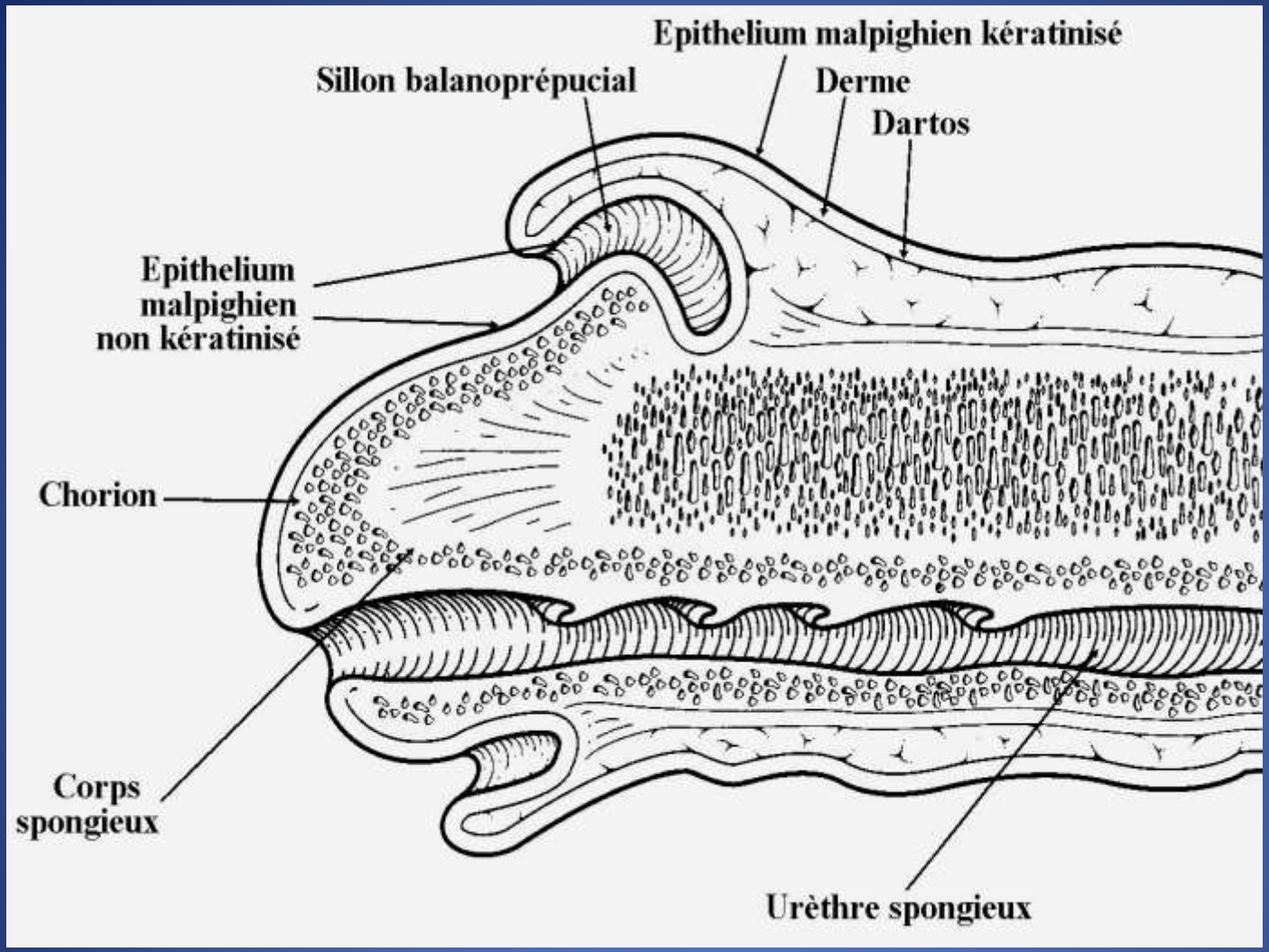
- Echo (Doppler)
- IRM
- (TDM)

Anatomie


Superficial dorsal vein
Corpus cavernosum
Deep dorsal vein
Dartos tunica
Tunica albuginea
Buck's fascia
Cavernosal arteries
Urethra
Corpus spongiosum

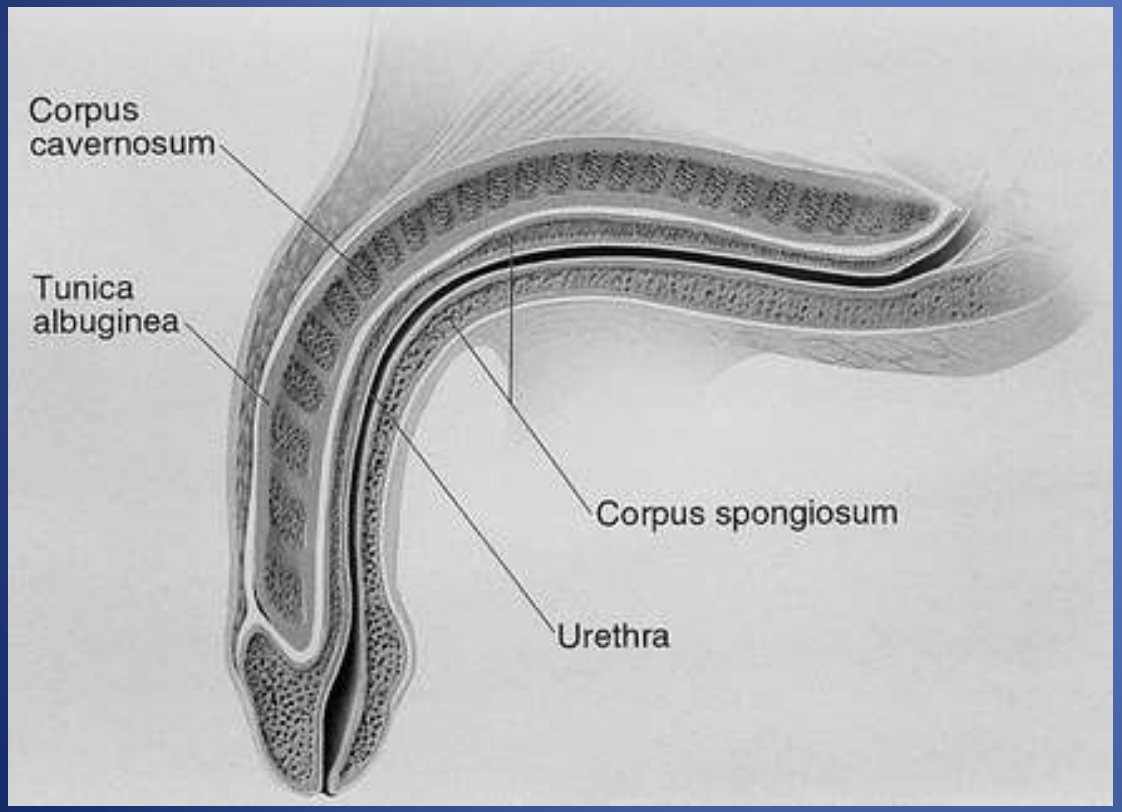


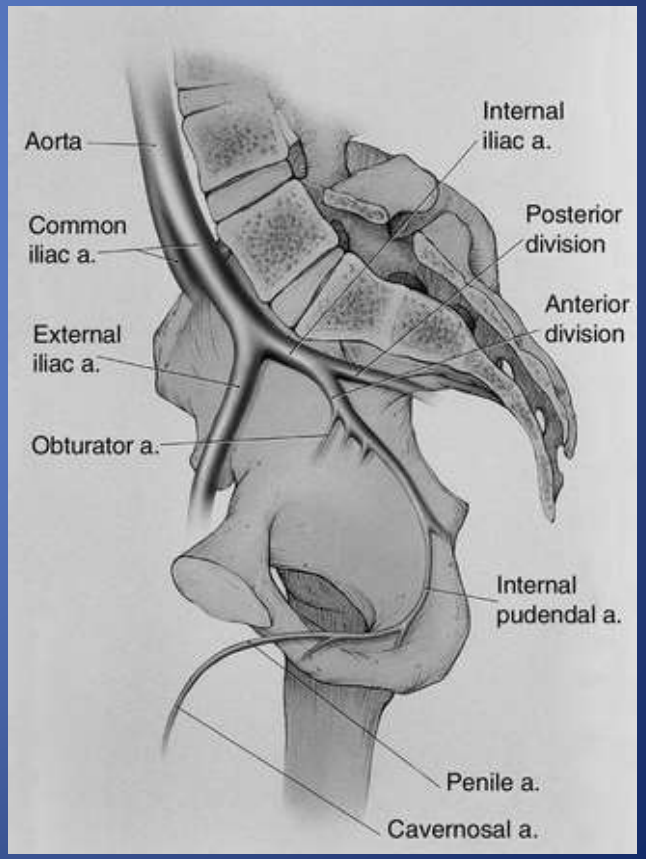
- Fig 1 : Anatomie descriptive
- a : corps spongieux
- b : corps caverneux
- 1 : gland
- 2 : branche ischio-pubienne
- 3 : fascia inférieur du diaphragme (membrane périnéale)
- 4 : muscle transvese superficiel
- 5 : corps périnéal
- 6 : pilier du pénis



- Camparo P, Vieillefond A, Molinié V, Sibony M. Pathologie du testicule et des organes génitaux externes masculins. Collection Le pathologiste. Éditeur Elsevier. 2006.

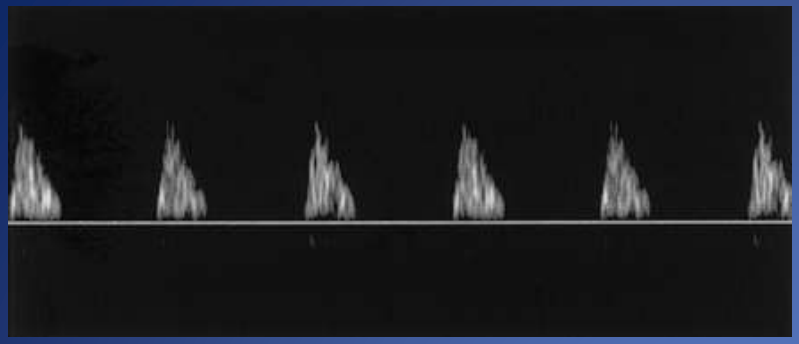
Anatomie 2


Corpus cavernosum
Tunica albuginea
Corpus spongiosum
Urethra

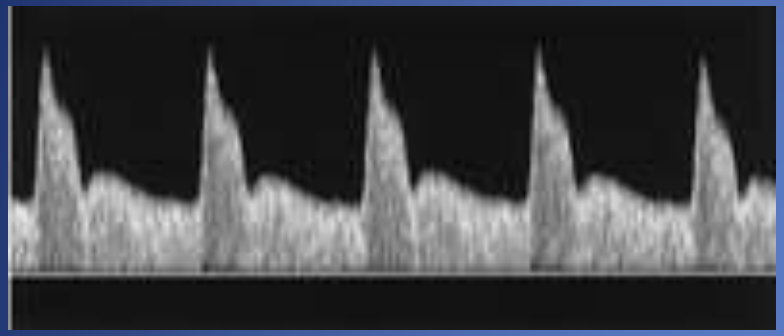

Aorta
Internal iliac a.
Common iliac a.
Posterior division
Anterior division
External iliac a.
Obturator a.
Internal pudendal a.
Penile a.
Cavernosal a.

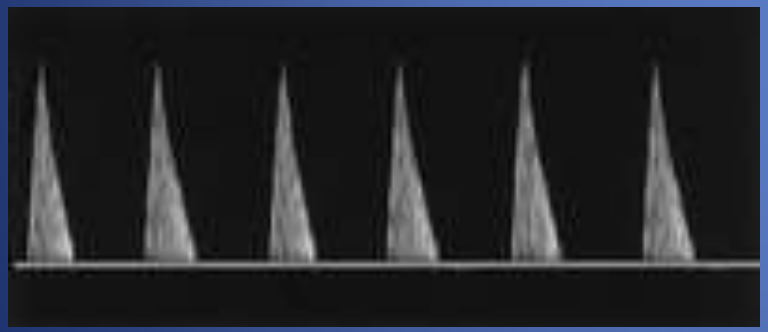
Physiologie de l’érection

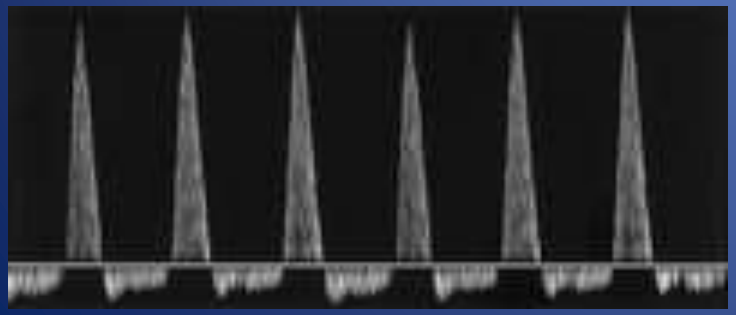
- Parasympathique : afflux de sang au sein des corps caverneux par augmentation de flux
- Augmentation de volume : compression des veines contre l’albuginée



flacide







Érection complete

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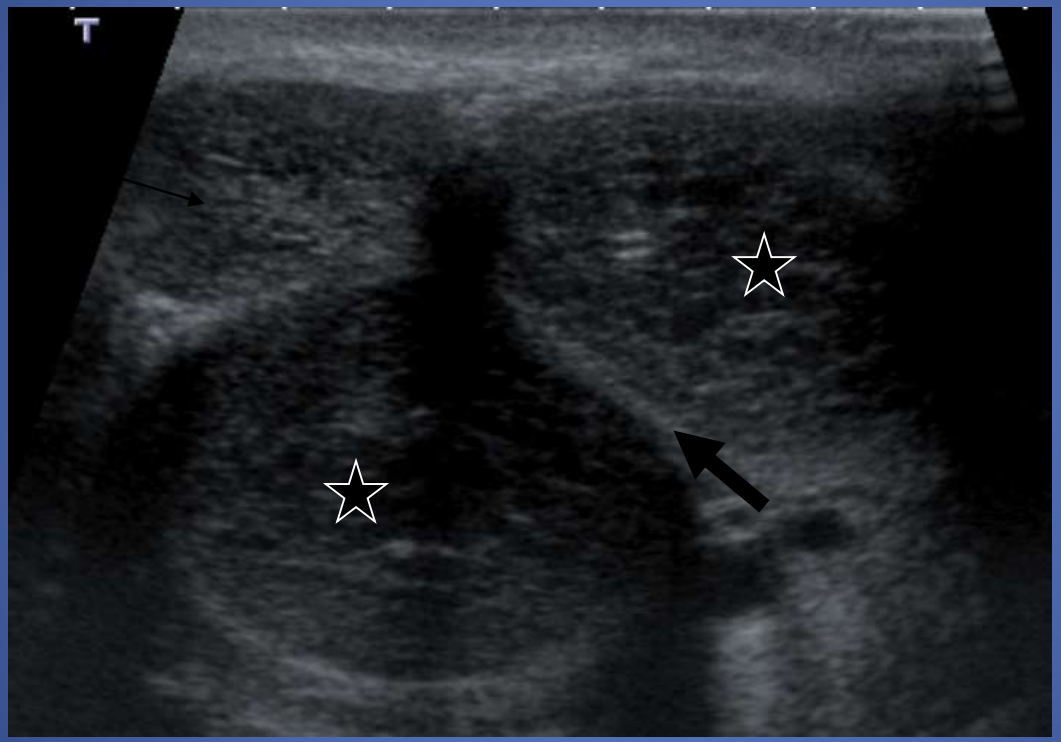
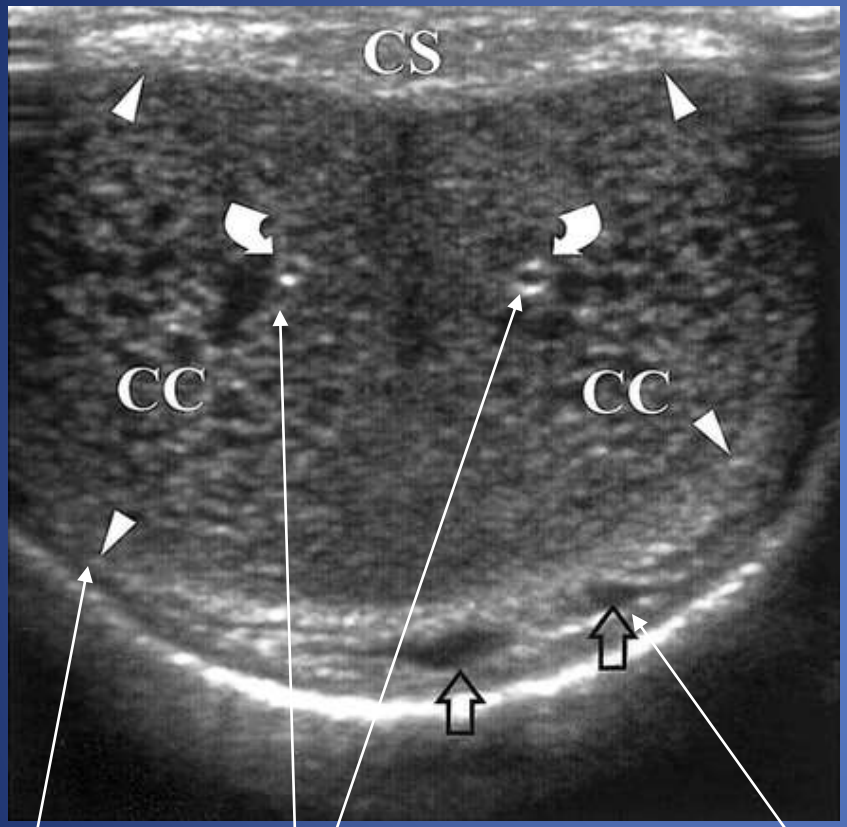
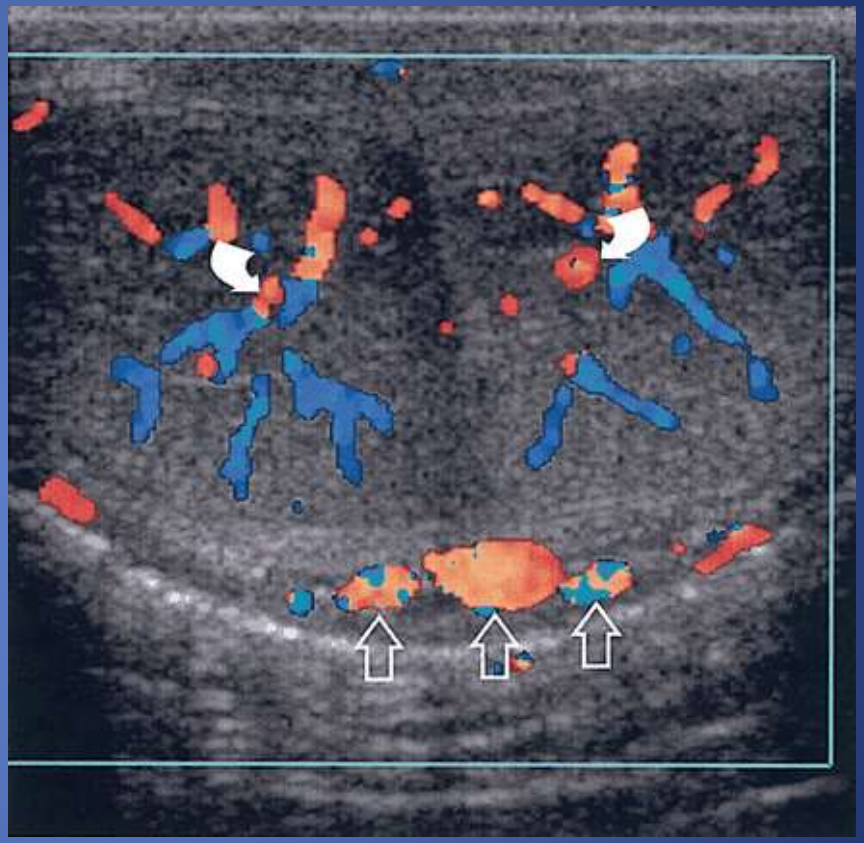






Arteres caverneuses

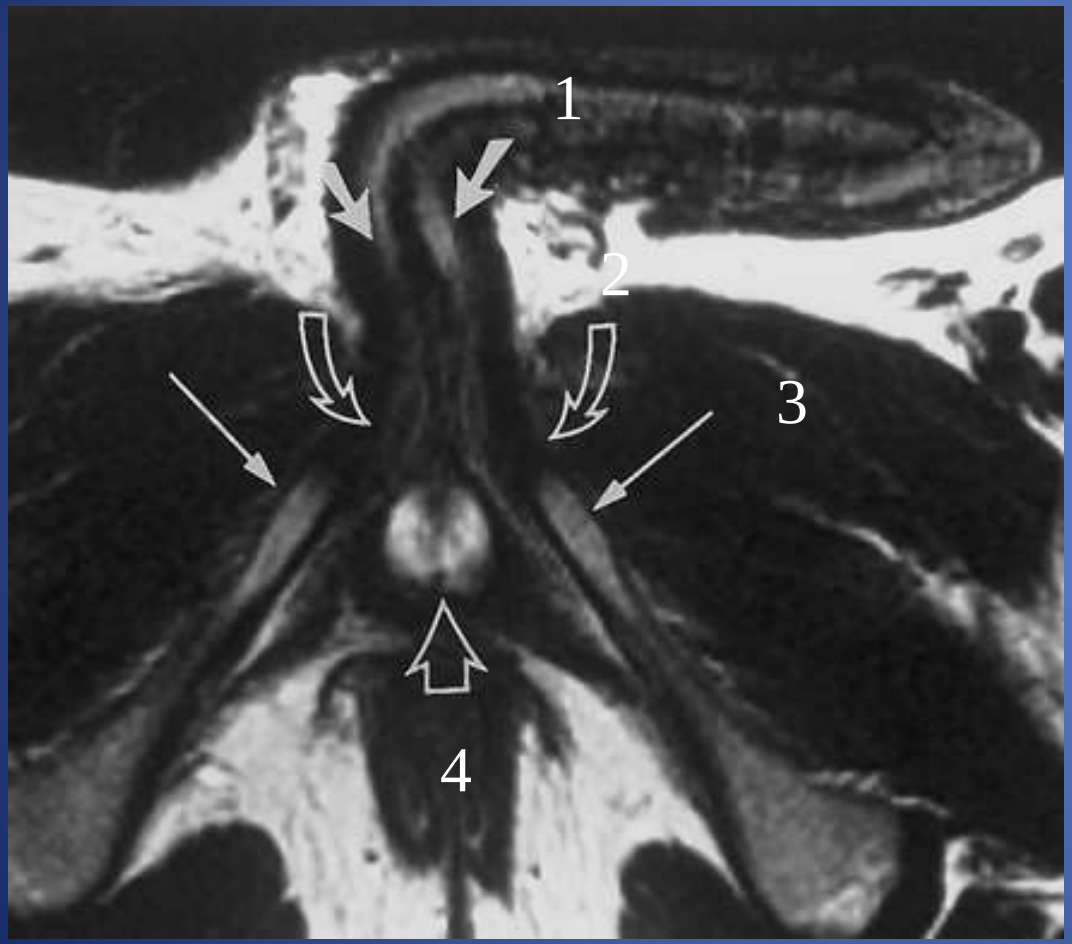
albuginée

Veines dorsales

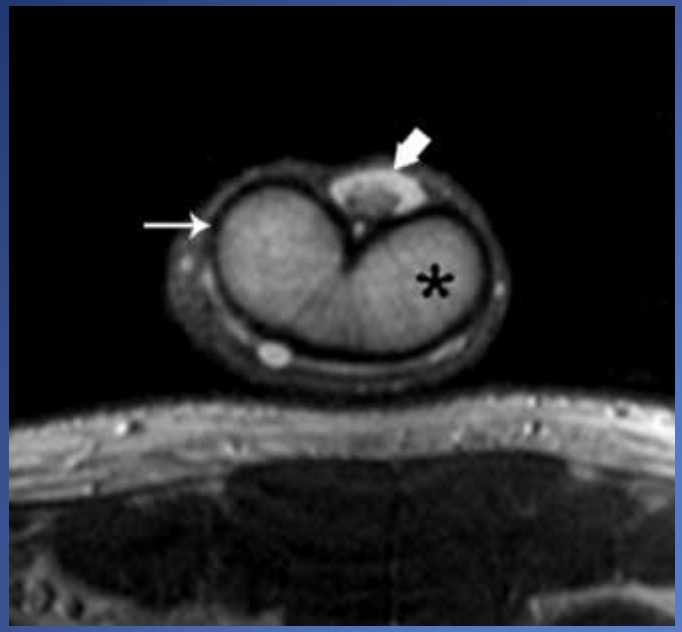
IRM

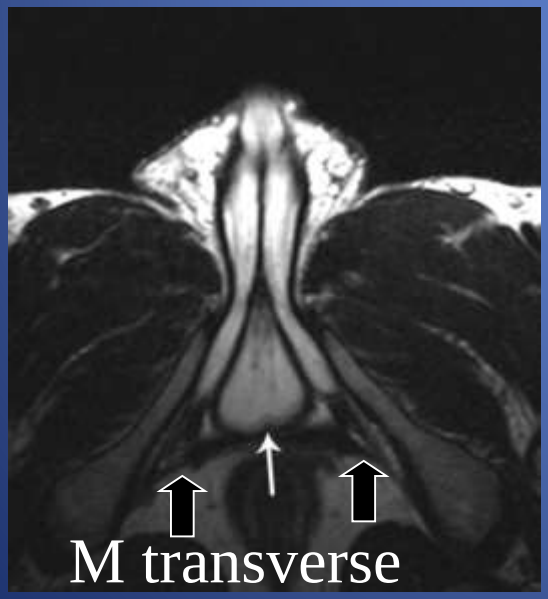
- Verge médiane +++
- Sur le ventre (mouvement respiratoire) ou reposant sur le scrotum
- Prostaglandines ?
- T2 X 3
- T1 dans le plan le plus favorable
- T1 gado

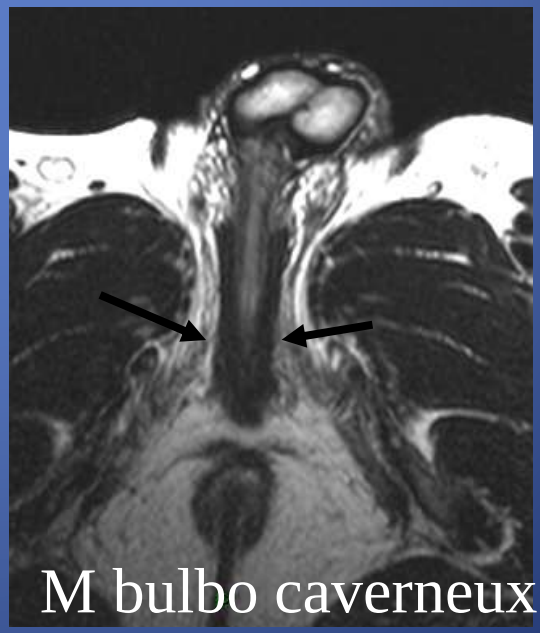
IRM normale, axiale T2



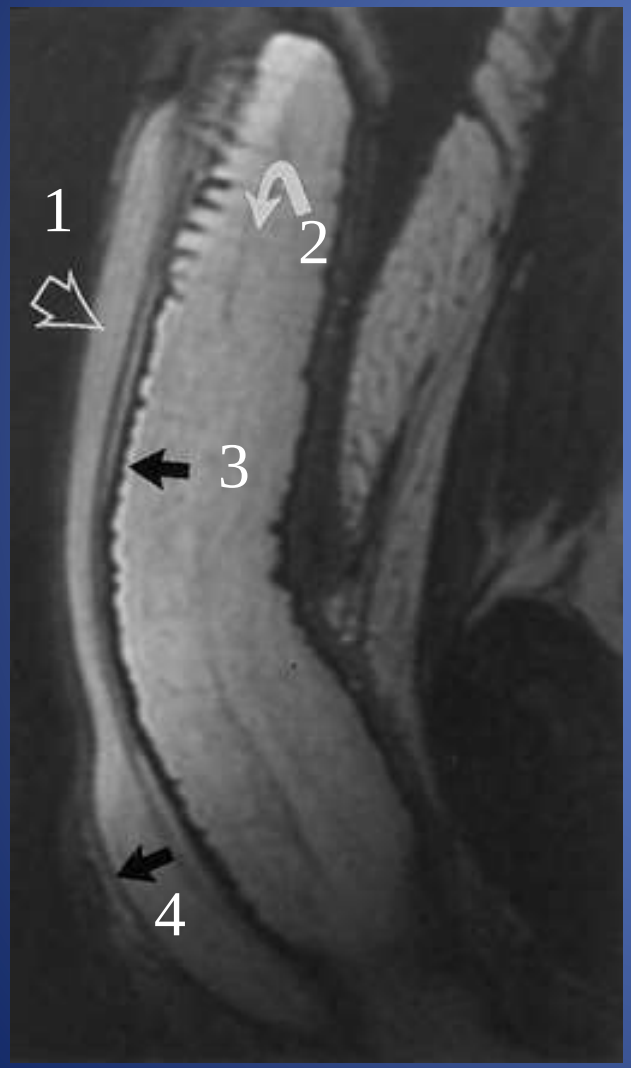
1 : corps caverneux
2 :crural
3 :ischion
4 : bulbe




M transverse


M bulbo caverneux

T2 après injection intra caverneuse de prostaglandine



1corps spongieux
2 corps caverneux
3 albuginée
4 albuginée

(Figure 1)

T - Tumeur primitive

Tx	Tumeur non évaluable
T0	Absence de tumeur
Tis	Carcinome in situ
Ta	Cancer verruqueux superficiel
T1	Envahissement du chorion
T2	Envahissement des corps spongieux ou caverneux
T3	Envahissement de l'urètre ou de la prostate
T4	Envahissement d'autres structures adjacentes

N - Ganglions Lymphatiques Régionaux

Nx	Non évaluables
N0	Absence de métastase ganglionnaire régionale
N1	Métastase ganglionnaire inguinale superficielle unique
N2	Métastases ganglionnaires inguinales superficielles multiples ou bilatérales
N3	Métastase(s) inguinale(s) profonde(s) ou pelvienne(s), uni ou bilatérales

M - Métastases à distance

Mx	Non évaluables
M0	Absence de métastase
M1	Métastase(s) à distance

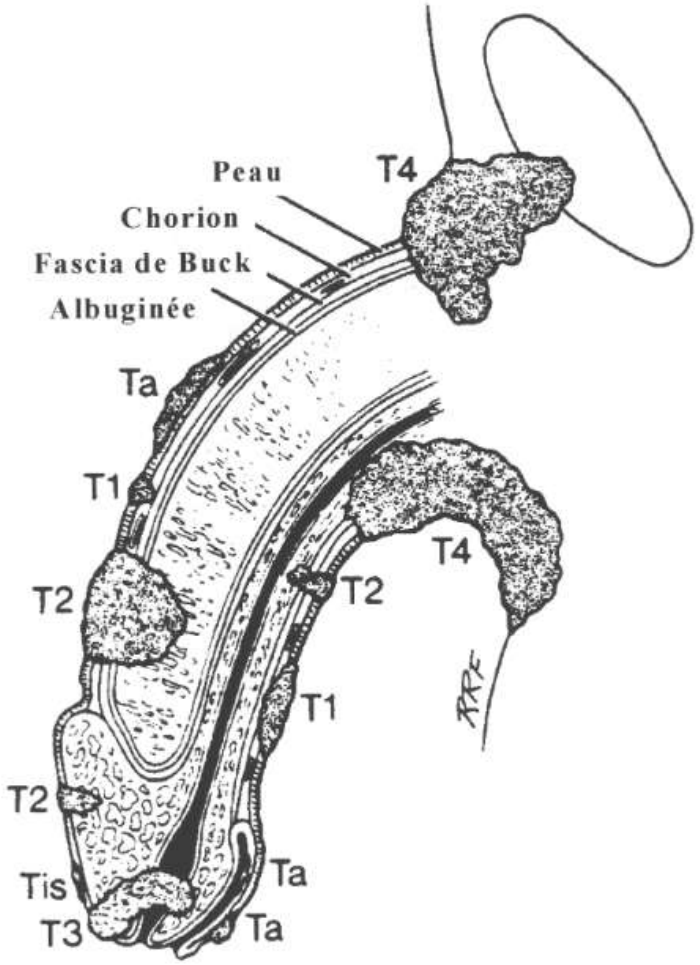
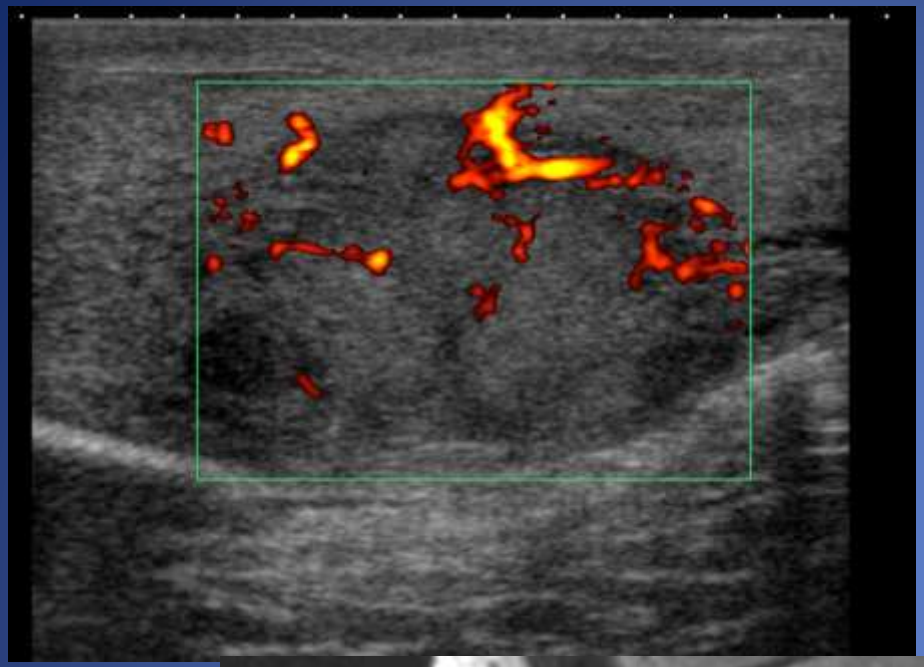


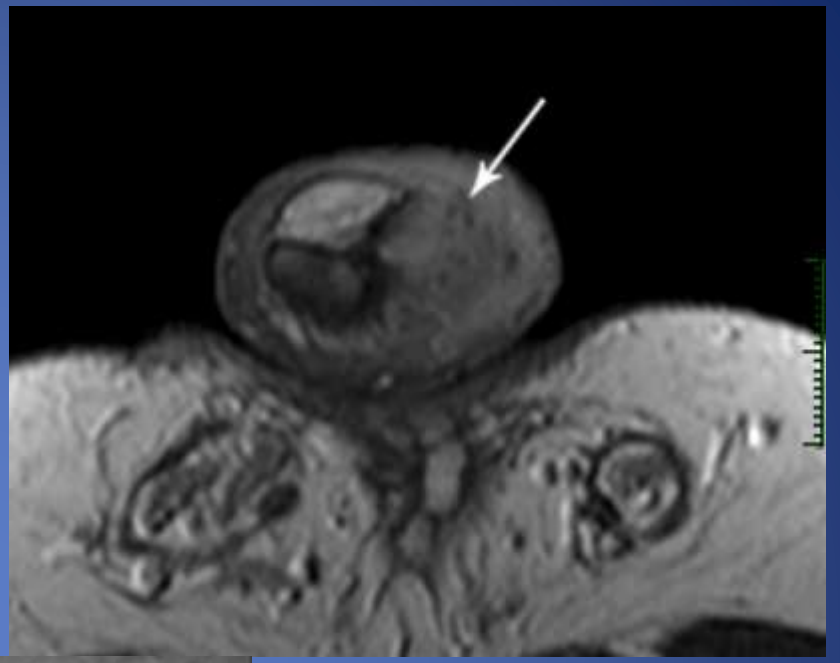
Figure 1 : Classification TNM 1997

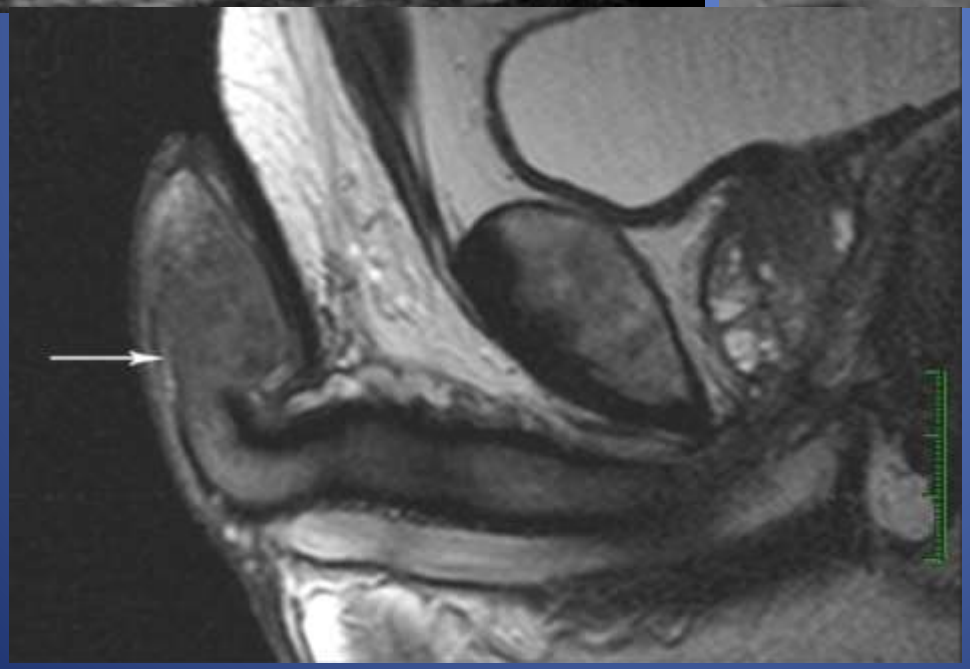
Les pathologies tumorales

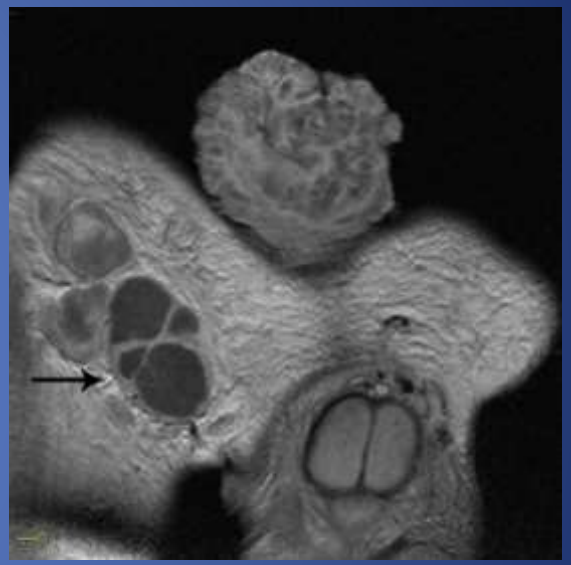
A l’échographie

- Hypoéchogène>hyperéchogène ou mixte
- Albuginée est hyperéchogène
- Surestimation de la taille ds lésions dans 2/3 des cas
- Ganglions sentinelle ?







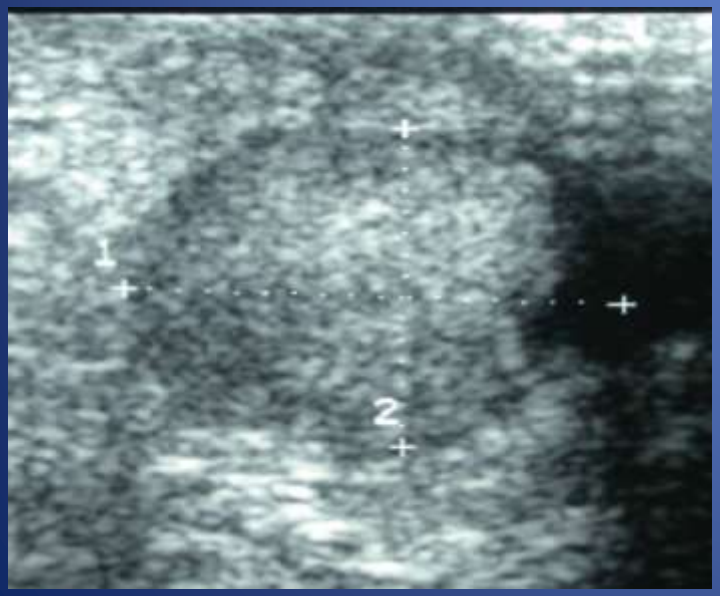


- 22ans

- Courtesy C Roy, CHU Strasbourg

L’extension ganglionnaire : gg inguinaux

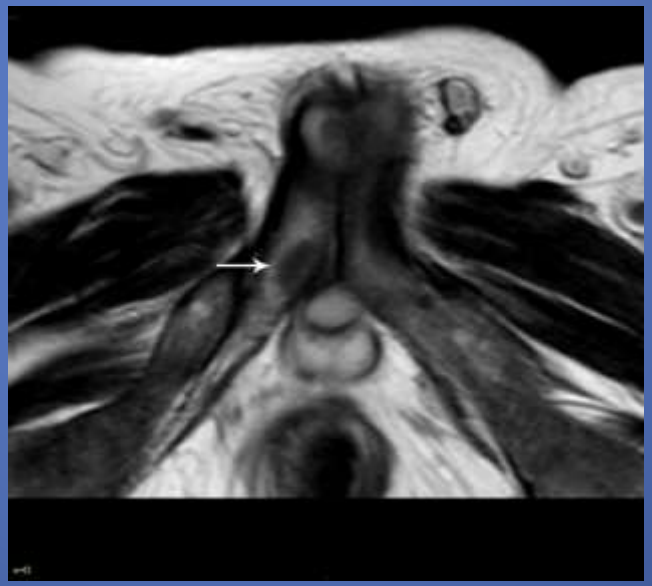
IRM

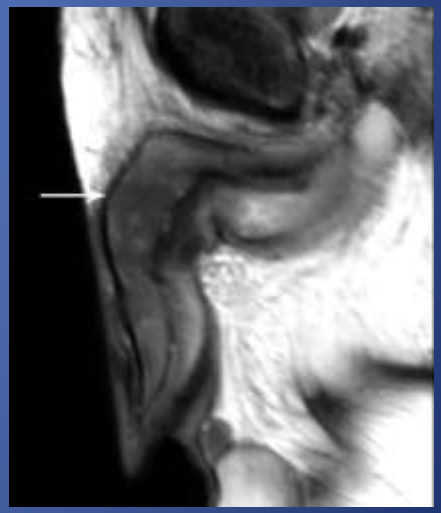


Echographie

Scanner

K sur néovessie
induration et douleur de la verge



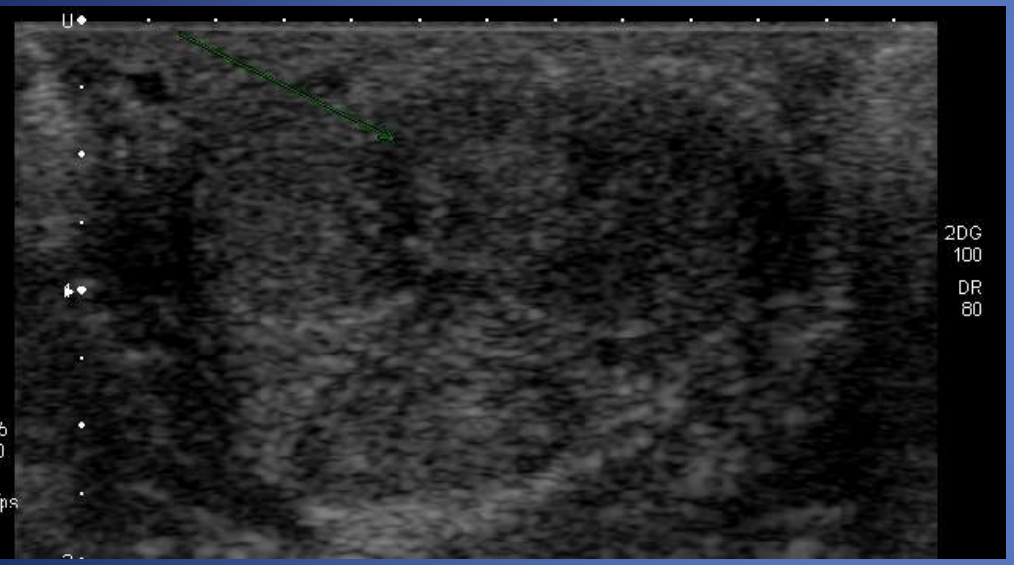


- Méta prouvée (biopsie per cutanée)

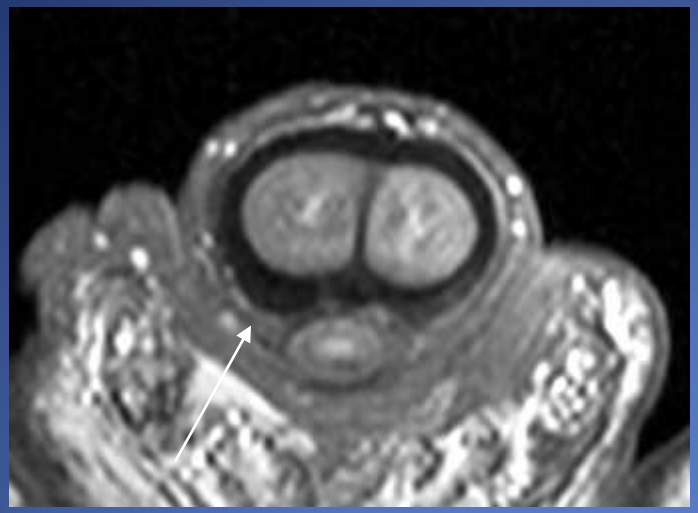
Maladie de la Peyronnie

Induration du penis par fibrose de l'albuginée
Coudure et douleur de la verge
Calcification possible
Middle age
US et irm

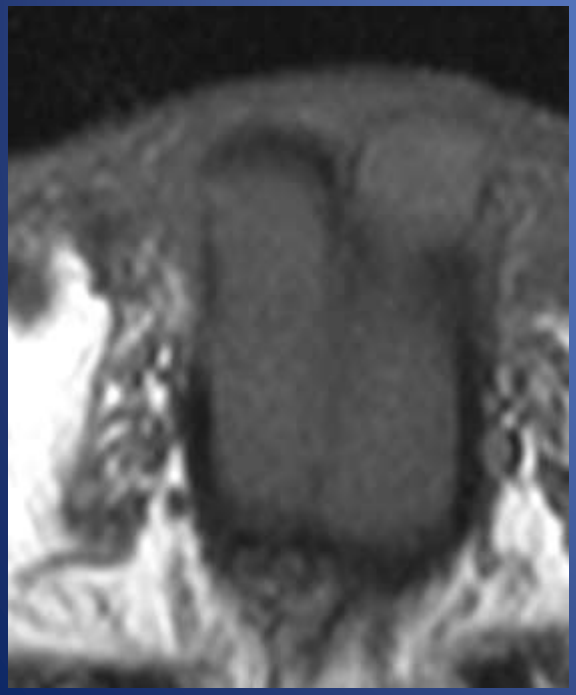
Douleur et deviation de la verge

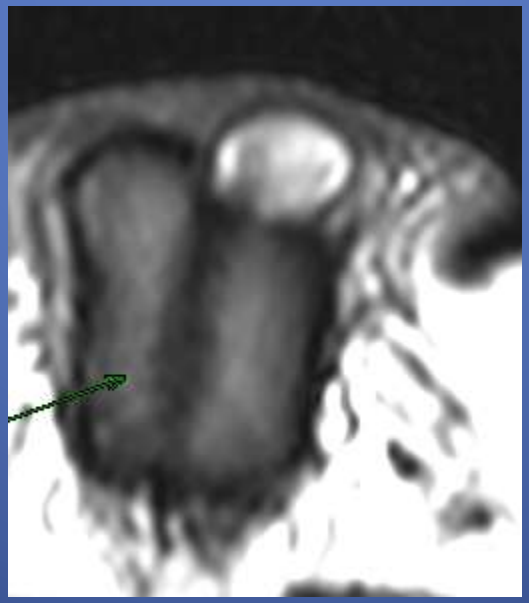


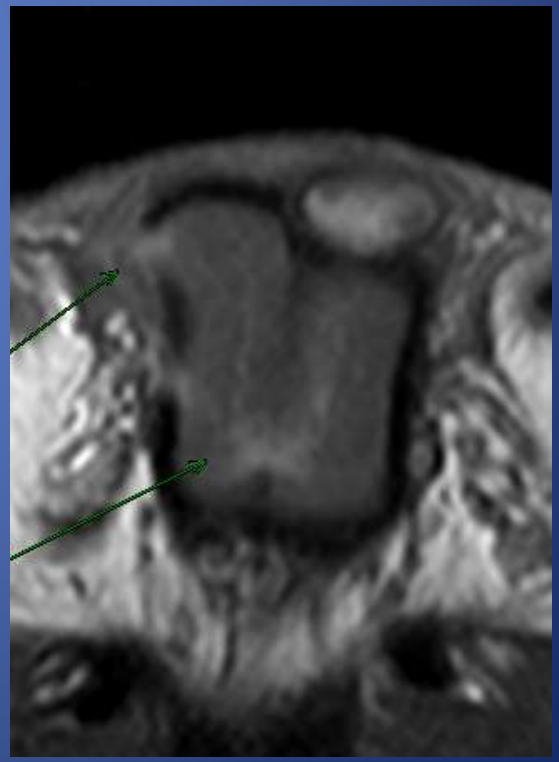
- Plaques et calcifications



Epaississement irrégulier de l’albuginée



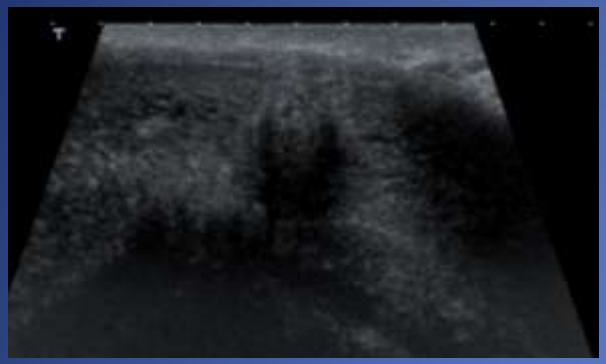


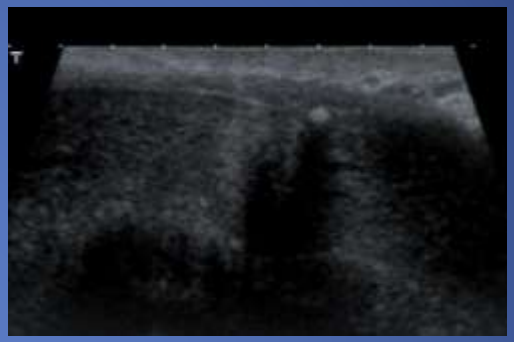


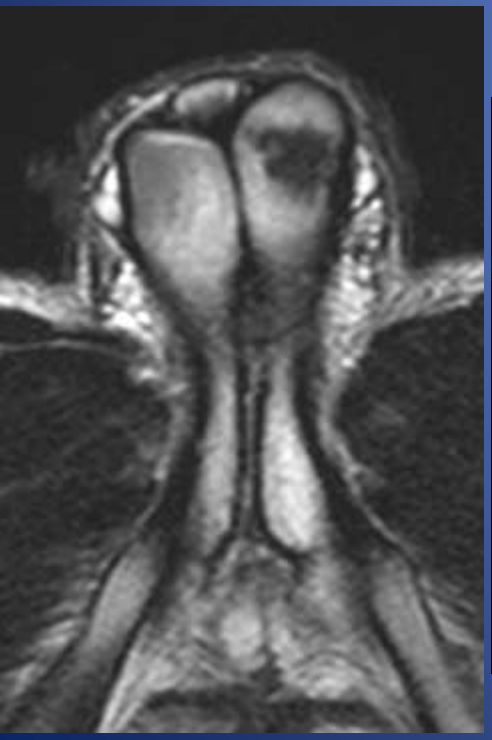
traumatisme

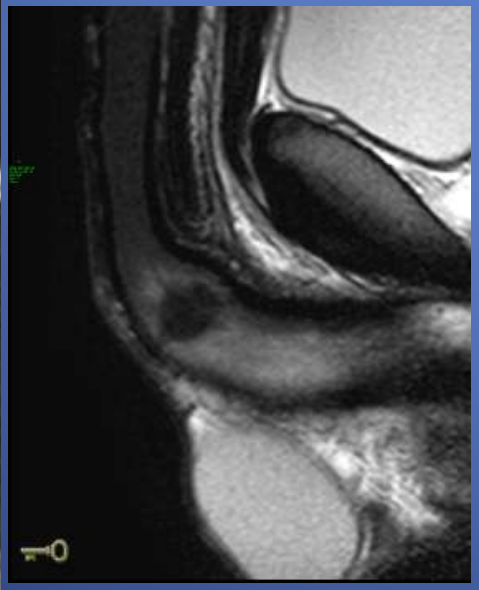
Rapport sexuel+++
Fausse route
Irm : discontinuité de l'albuginée
IRM discutée
Reparation precoce : evite
Dysfonction erectile

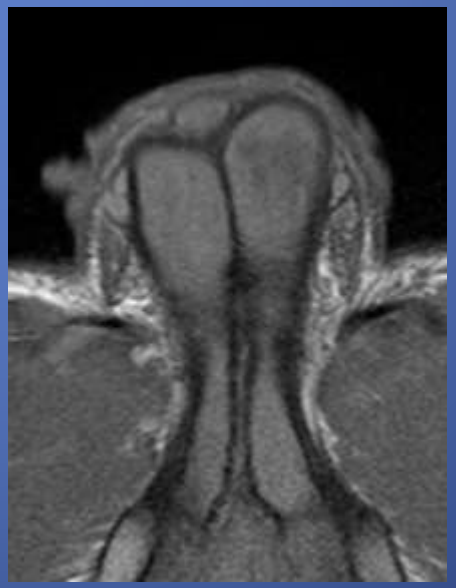
Coudure à l’erection apres faux pas du coit

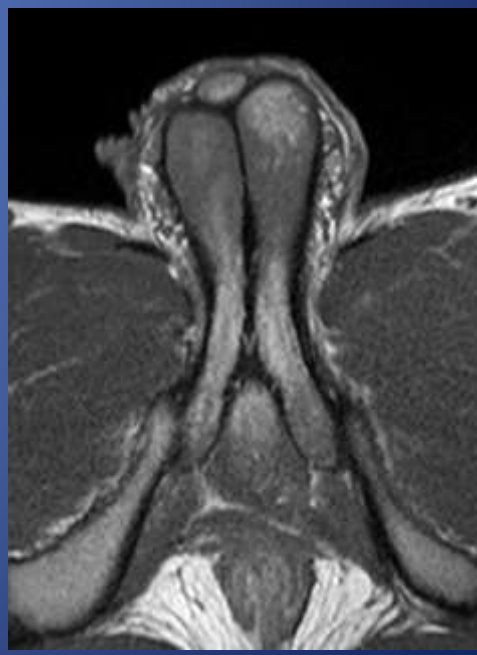






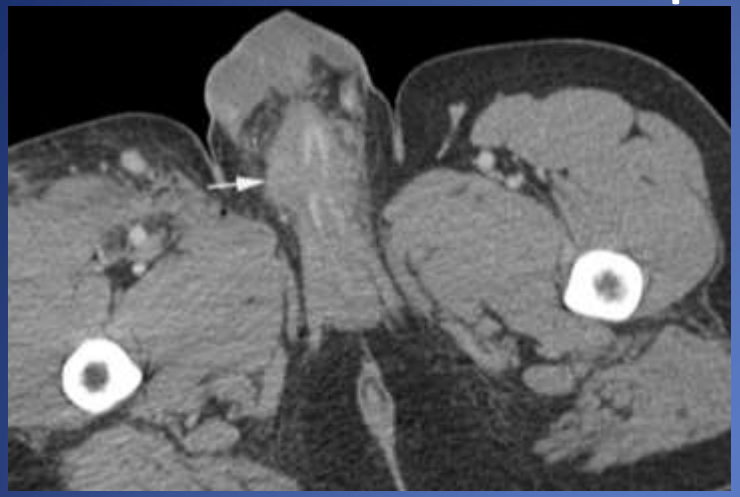


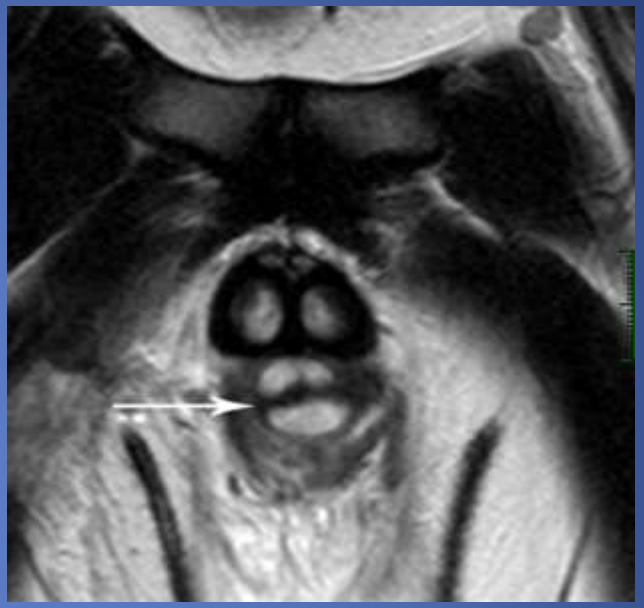


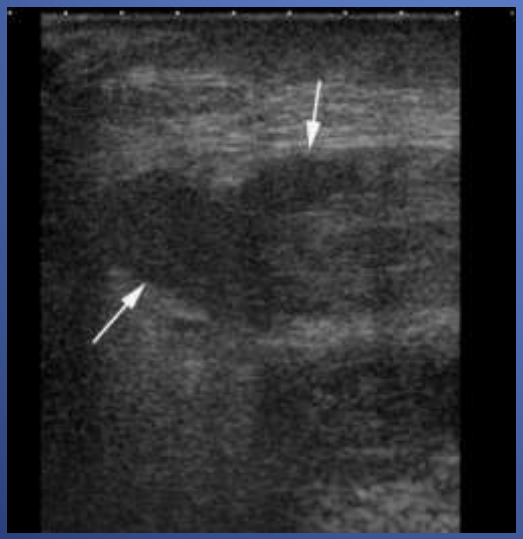


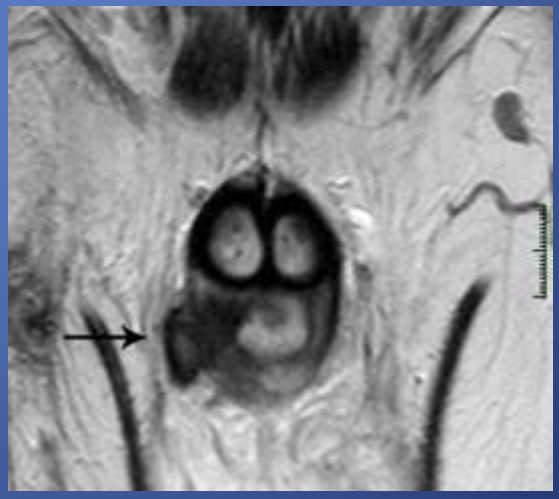
Faux pas du coit

Plaie par arme à feu

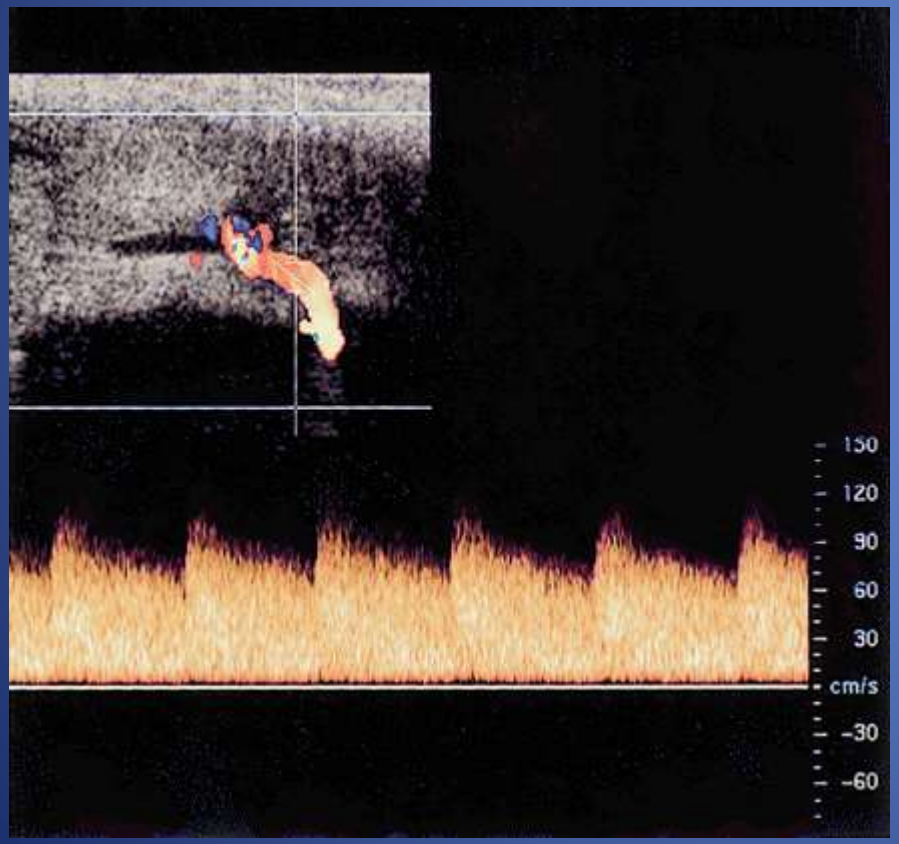


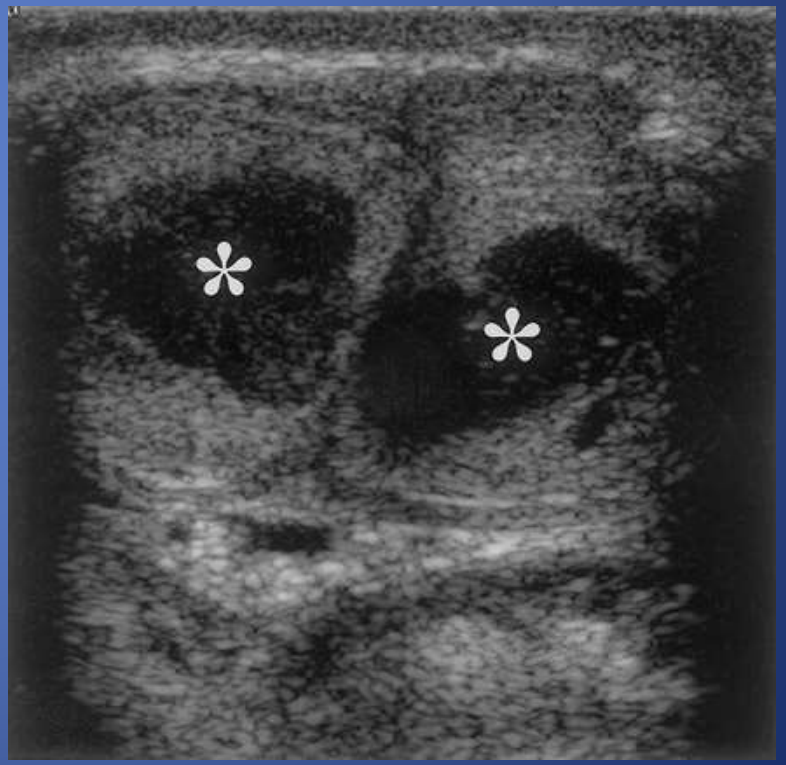




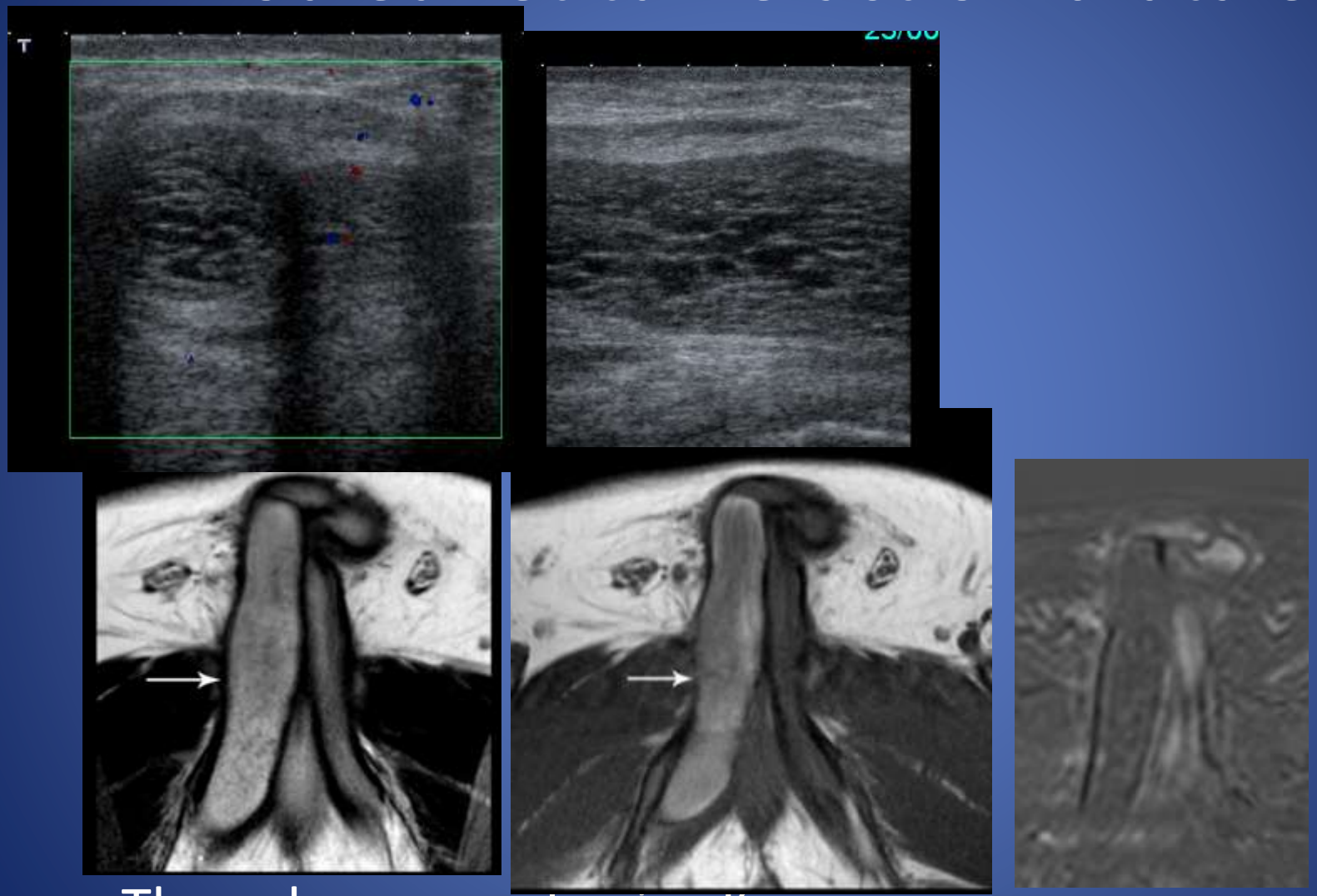


Priapisme artériel : fistule artério caverneuse post traumatique



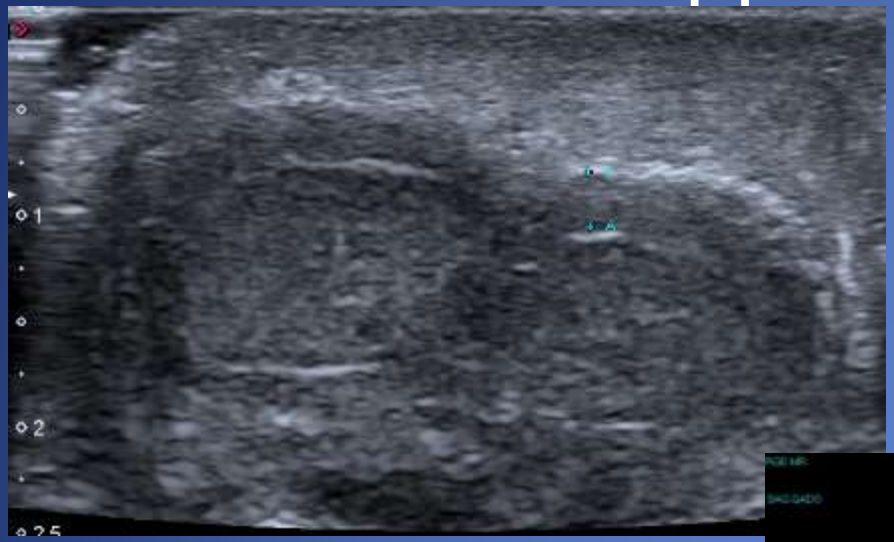


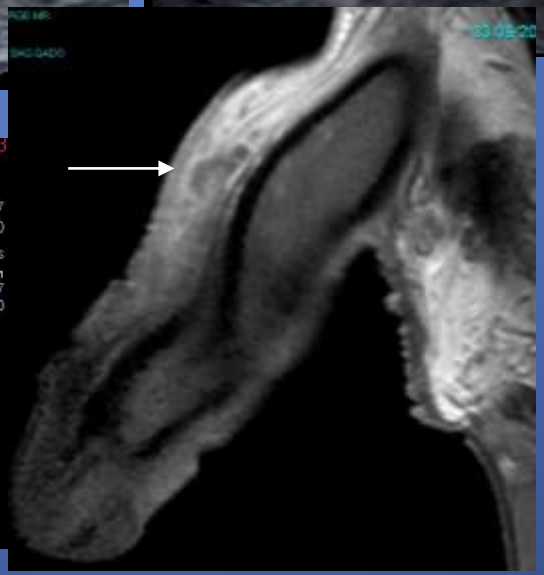
Douleur et tuméfaction brutale

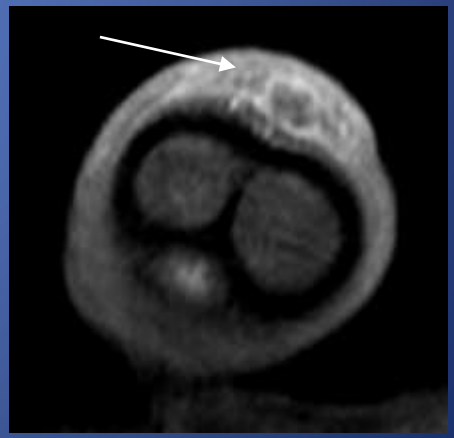


- Thrombose spontanée d'un corps caverneux

Douleur et tumefaction brutale apres un rapport sexuel







- Thrombose de la veine superficielle (Maladie de Mondor)

Gangrene de Fournier: sepsis sous cutané grave…

Conclusion

- Imagerie peu fréquente
- Clinique : interrogatoire/palpation/
- Connaître l'anatomie de base
- Complémentarité de l' écho et de l'IRM
- Répondre à la question posée….avec ses limites !