

Aspects échographiques du diverticule de Meckel compliqué chez l'enfant : à propos de 57 cas

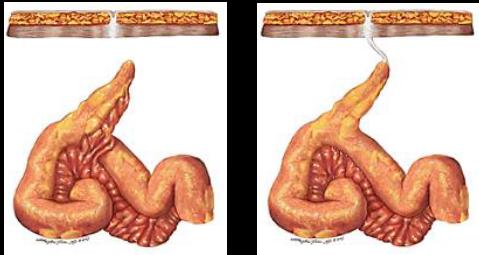
Etude rétrospective monocentrique sur 16 ans (2003 - 2018)

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Introduction

- ▶ Anomalie congénitale la plus fréquente du tube digestif (0,3 - 2,9% / M = F)
- ▶ Reliquat du canal omphalo-mésentérique
 - ▶ Diverticule borgne communicant avec l'iléon
 - ▶ +/- bride



D'après A. Levy

- ▶ Anatomo-pathologie :
 - ▶ Longueur (4 mm - 11 cm) et diamètre variables → **Aspects multiples**
 - ▶ Paroi :
 - ▶ 4 couches intestinales
 - ▶ Muqueuse ectopique : gastrique (25 - 50% des DM), pancréatique (5 - 16%)

Introduction

- ▶ Asymptomatique : la grande majorité des cas
- ▶ Complications :
 - ▶ Garçons (> 75%) > filles
 - ▶ < 6 ans (> 70%)
- ▶ Diagnostic souvent per-opératoire
- ▶ Examen n° 1 : ECHOGRAPHIE
 - ▶ Aspect échographique méconnu
 - ▶ Forme diverticulaire typique rare

Urgence abdominale

Occlusion :
Abdomen aigu +/- fébrile
Hémorragie digestive basse

Chronique

Saignements mineurs
Anémie
Douleurs abdominales

Le DM peut se cacher derrière toute
urgence abdominale de l'enfant



Apprendre à le reconnaître !

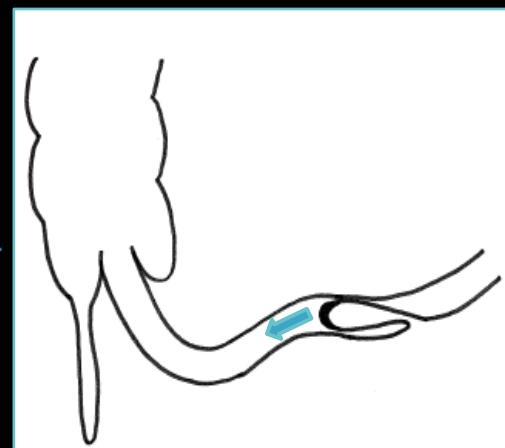
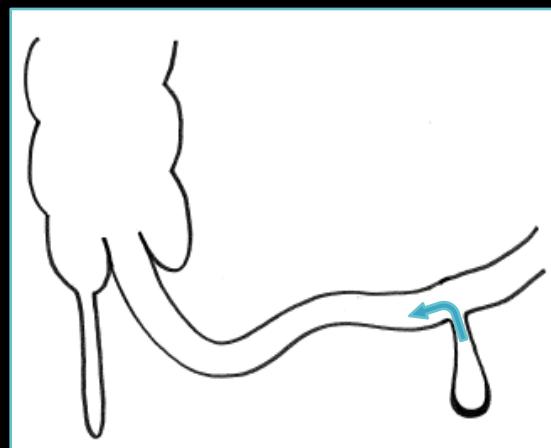
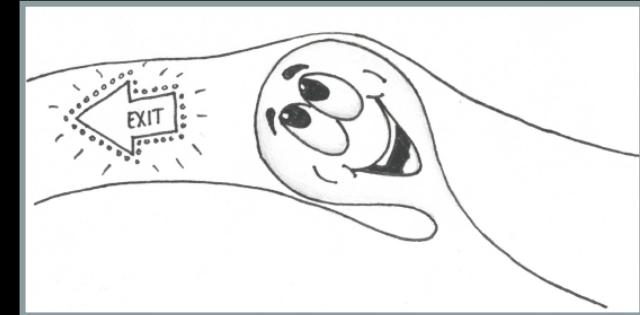


Complications

1. Occlusion (n = 31)
 - a. Invagination (n = 21)

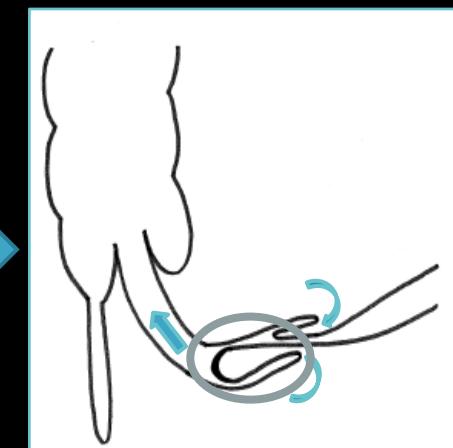
Invagination

► Mécanisme



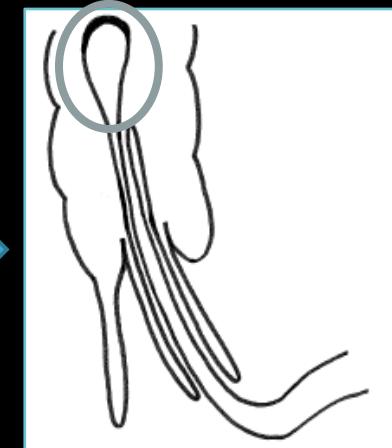
Etape 1 : inversion du DM

n = 1



Etape 2 : IIA iléo-iléale

n = 7



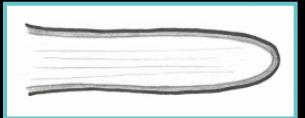
Etape 3 : IIA iléo-iléo-colique

n = 13

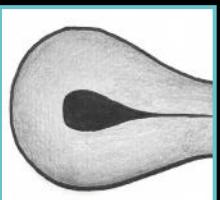
DM à la tête du boudin d'invagination



Le DM retourné

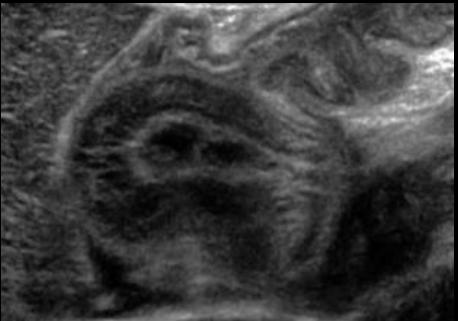


2 - 3 cm



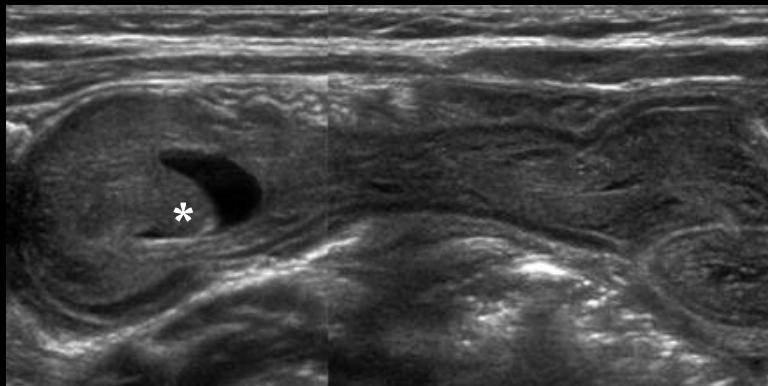
Tubulaire
+
Graisse

n = 7



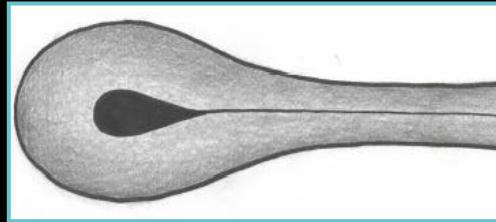
En goutte
+
Liquide

n = 6



En raquette
+
Liquide et / ou graisse

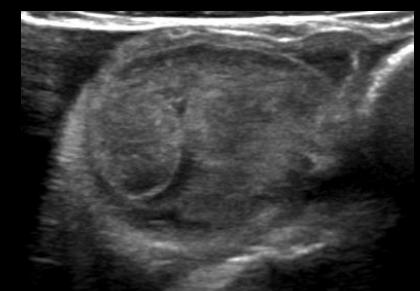
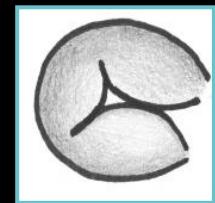
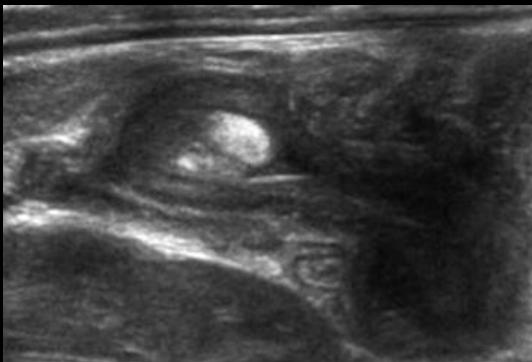
n = 4



3 - 6 cm

Non reconnu

n = 3



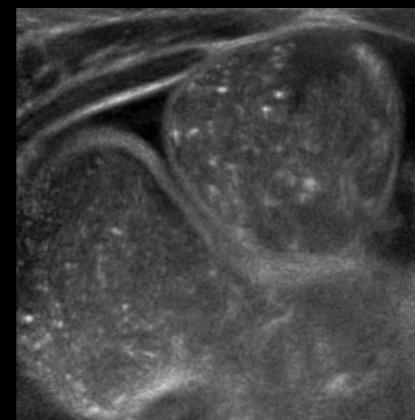
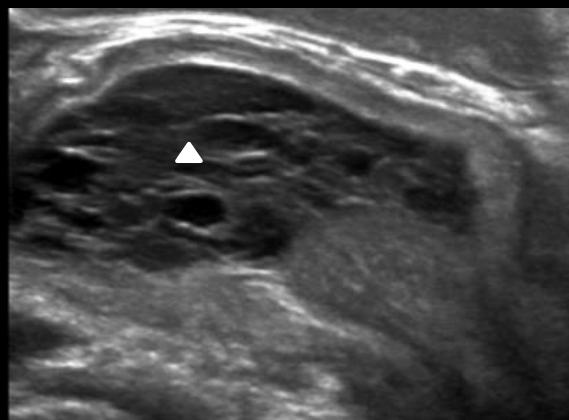
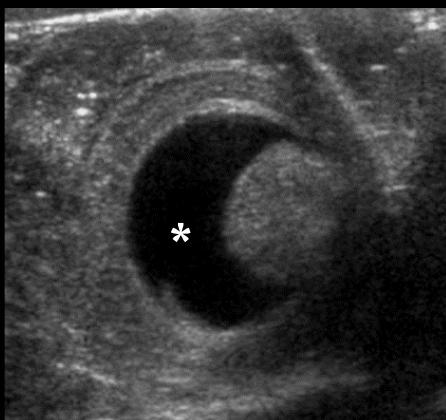
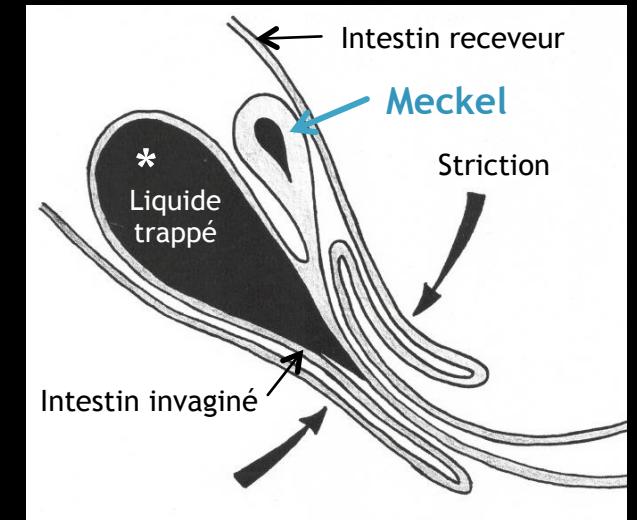
Rond

Inversion diverticulaire

n = 1

Invagination

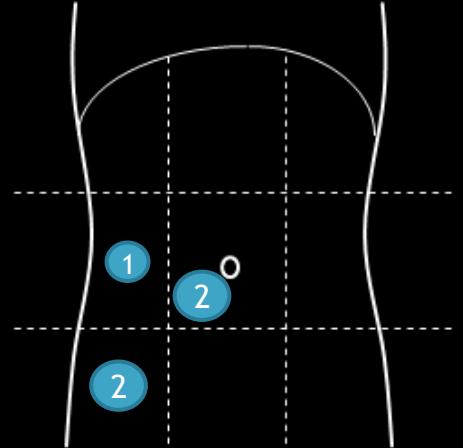
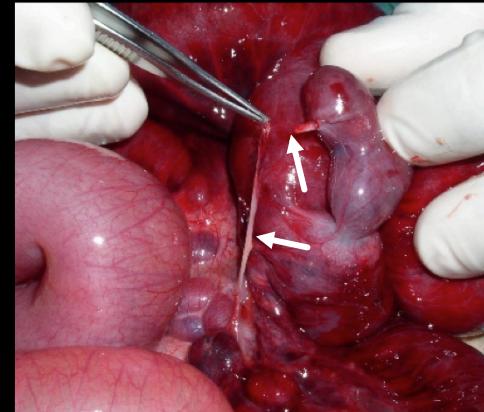
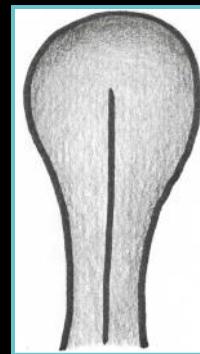
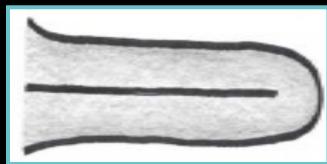
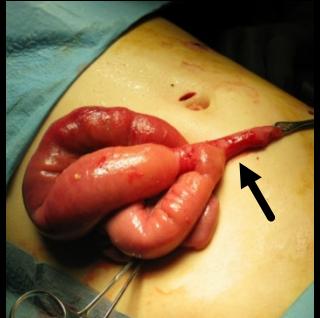
- ▶ Signes de gravité (2 critères associés : 13 cas / 1 seul critère : 6 cas) :
 - ▶ Liquide trappé *
 - ▶ Quantité = souffrance intestinale = résection étendue
 - ▶ Aspect en nid d'abeille ▲ = fibrine = nécrose = irréductibilité chirurgicale
 - ▶ Occlusion d'amont



Complications

1. Occlusions (n = 31)
 - b. Sur bride (n = 8) ou volvulus du DM (n = 2)

Bride congenitale

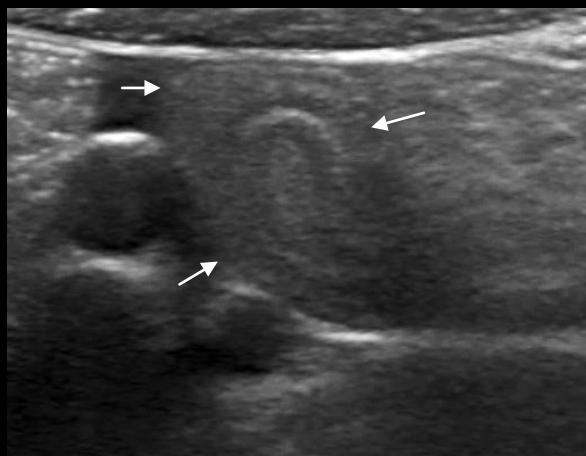


Niveau transitionnel



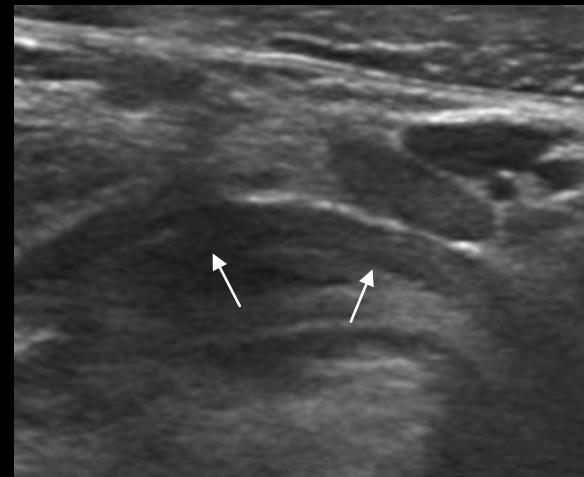
Tubulaire

n = 1



En raquette

n = 2



Bride épaisse hypoéchogène

n = 2

Bride épaisse hypoéchogène + DM

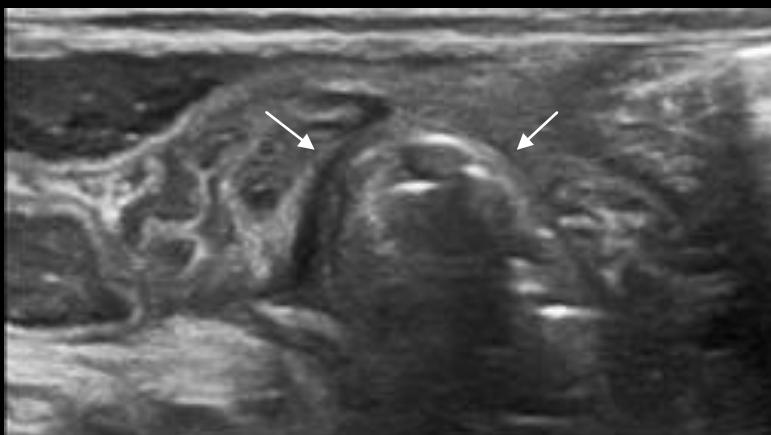
Aucune étiologie

n = 3

Volvulus du DM

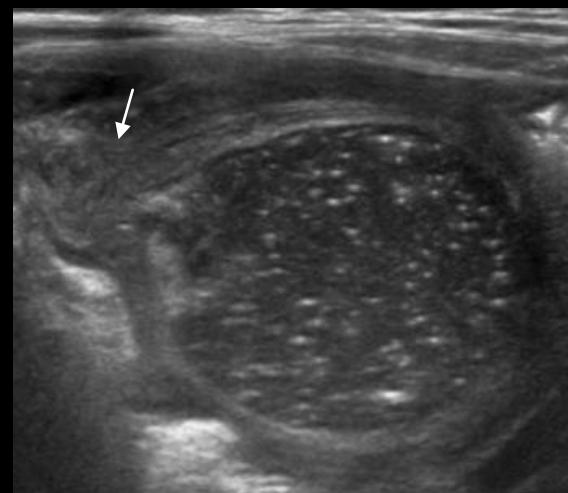


Au contact d'une spire de torsion



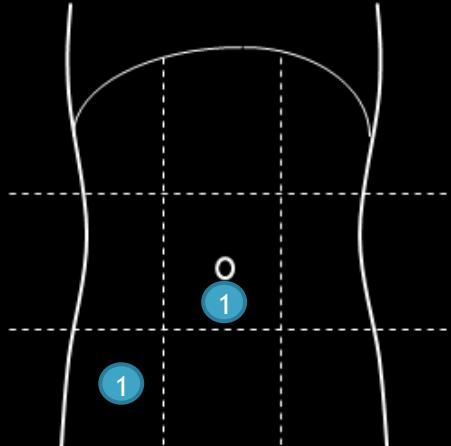
Pseudo-anse épaisse à contenu aérique

n = 1



Pseudo-anse dilatée épaisse
apéristaltique se terminant en bec

n = 1

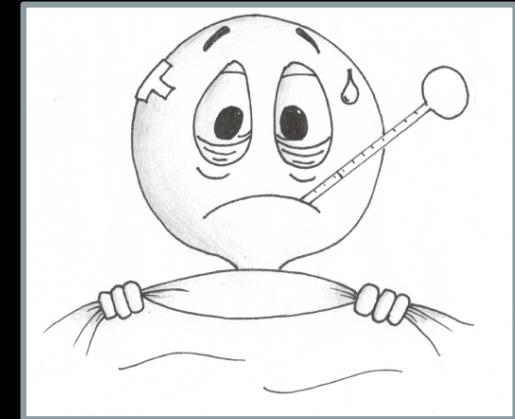


Niveau transitionnel

Complications

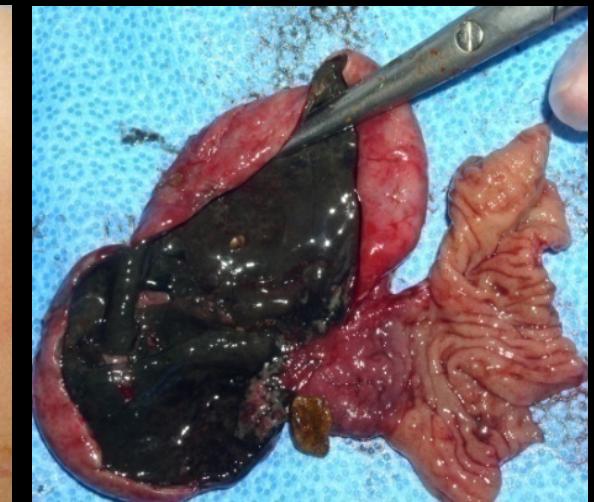
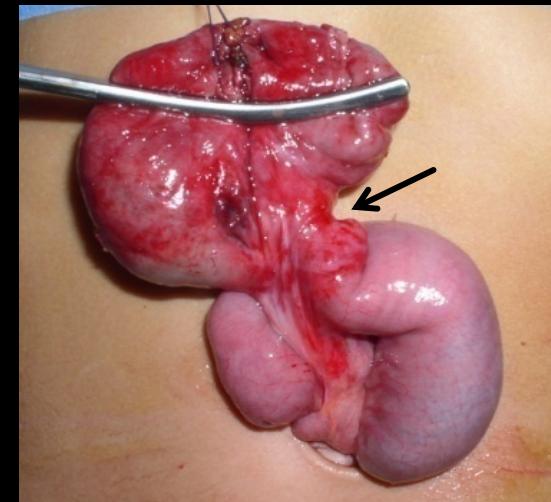
2. Diverticulite ($n = 15$)

Diverticulite



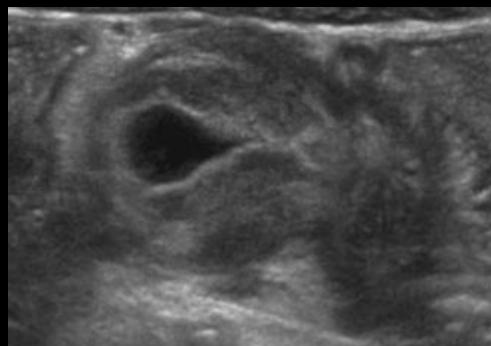
- ▶ Mécanisme :
 - ▶ Obstruction du collet => Stase => Pullulation microbienne
 - ▶ Anatomique (collet étroit)
 - ▶ Pariétal (sténose peptique)
 - ▶ Endoluminal (entérolithe, bézoard)

- ▶ Stades :
 - ▶ Simple
 - ▶ Suppurée
 - ▶ Perforée (13/15)



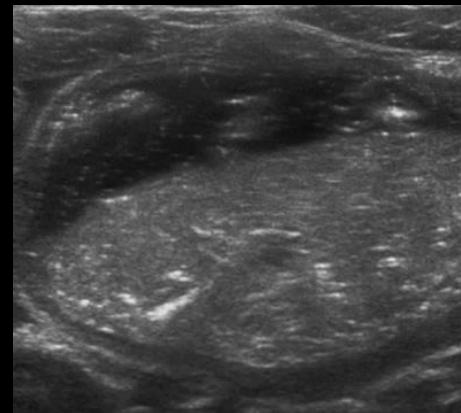
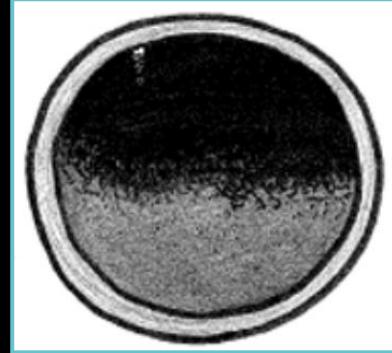
Diverticulite

Hétérotopie fundique



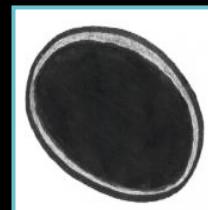
Epaissie non dilatée

n = 5



Dilatée non épaissie

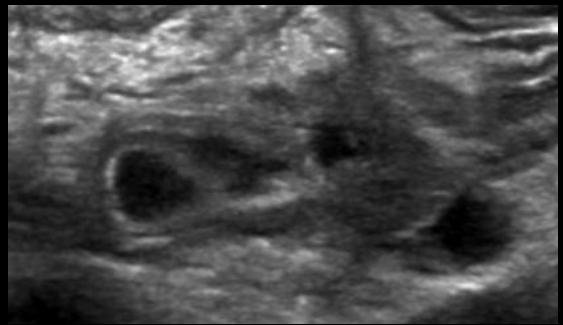
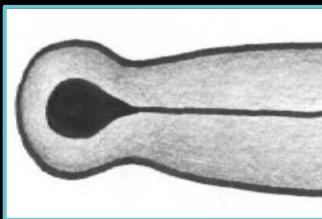
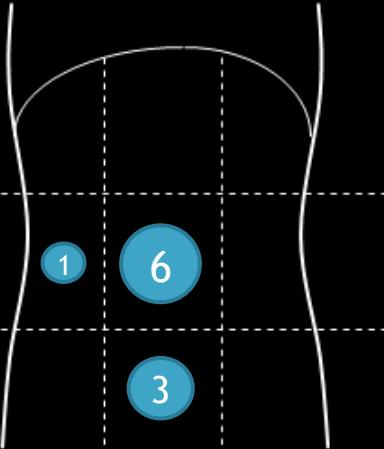
n = 3



Non dilatée non épaissie

n = 1

Pseudo-anse liquidiennne apéristaltique déstratifiée

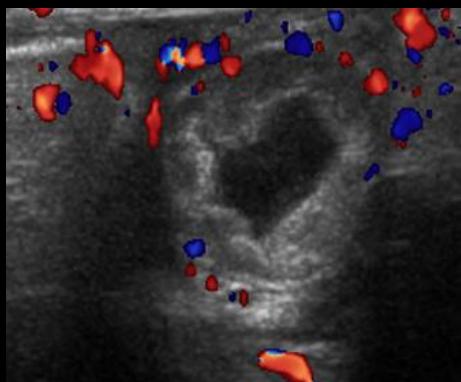


Diverticule tubulaire à extrémité arrondie

n = 1

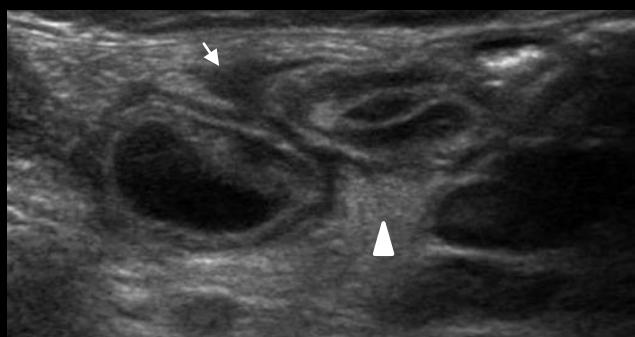
Diverticulite

Signes associés



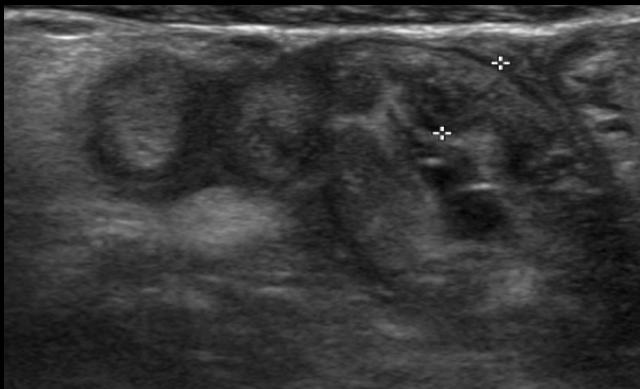
Hyperhémie

n = 9

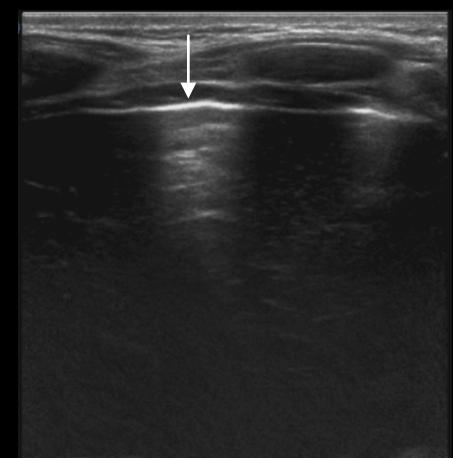


Péritonite localisée

n = 8



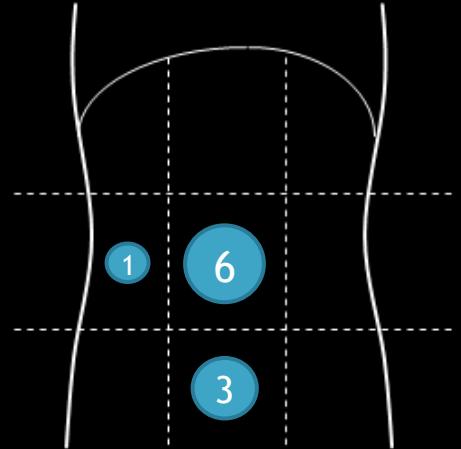
Epanchement échogène



Pneumopéritoine

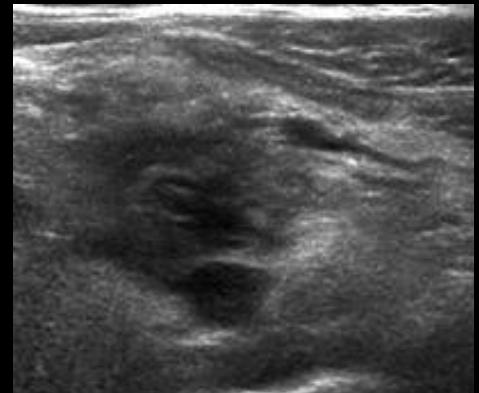
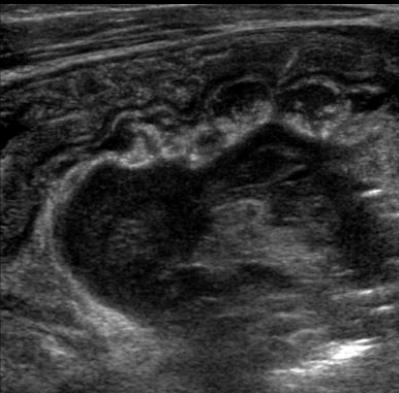
n = 4

Péritonite généralisée



Forme « piège »

- ▶ Pseudo-appendicite compliquée (n = 5)
 - ▶ Présentation potentiellement similaire
 - ▶ Points clés :
 - ▶ Visualisation de l'appendice sain
 - ▶ Péritonite en situation atypique (FIG : n = 1)
 - ▶ Nouveau né (n = 1)



Collection

Péritonite localisée centrée par une structure tubulaire

Complications

3. Hémorragie (n = 10)

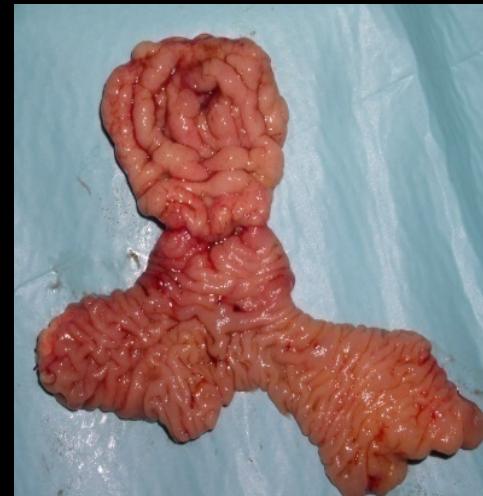
Hémorragie



- ▶ Mécanisme :
 - ▶ Saignement d'ulcérations peptiques d'une muqueuse ectopique

Gastrique fundique

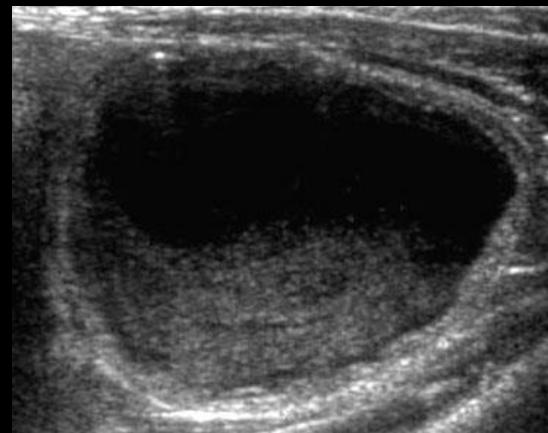
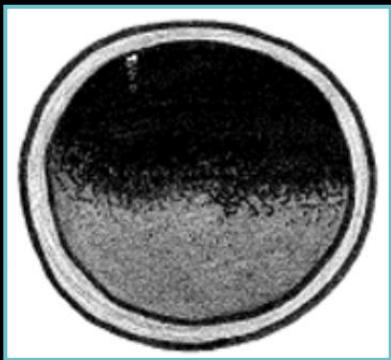
100%



Pancréatique

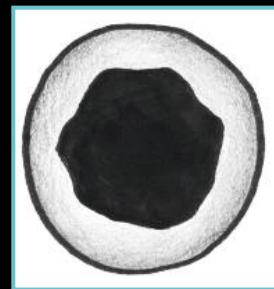
n = 1

DM hémorragique



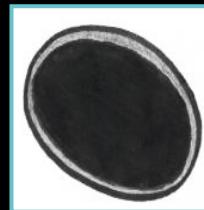
Dilatée

n = 1



Non dilatée épaisse

n = 1



Non dilatée non épaisse

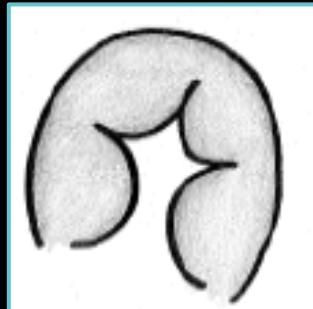
n = 1

Pseudo-anse liquidienne apéristaltique déstratifiée

Contenu :

- Liquidien
- Échogène déclive
- Air

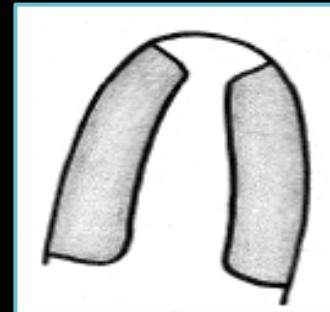
DM hémorragique



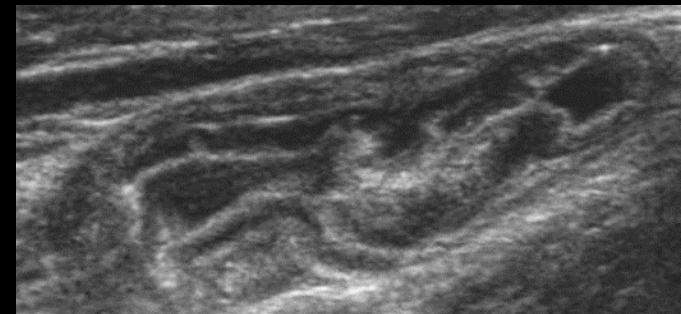
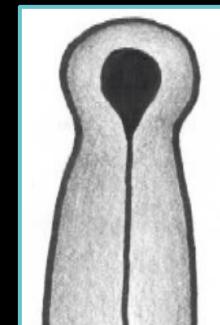
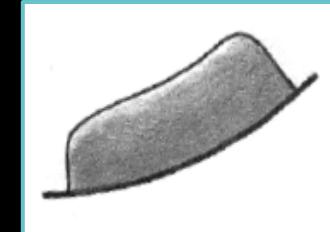
Hétérotopie multinodulaire



Hétérotopie en plaque



Remaniements ulcérés



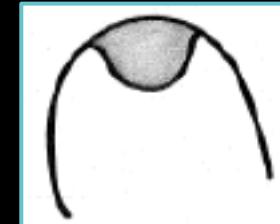
Diverticule tubulaire à extrémité arrondie



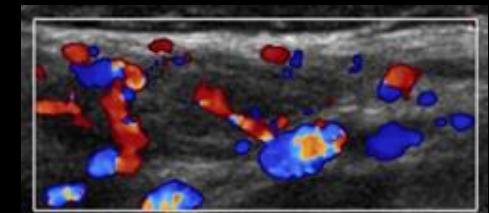
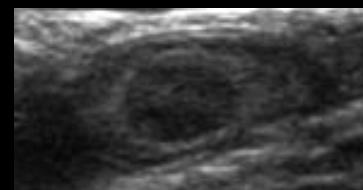
Pseudo-anse avec muqueuse hypoéchogène hyperplasique

n = 2

n = 1



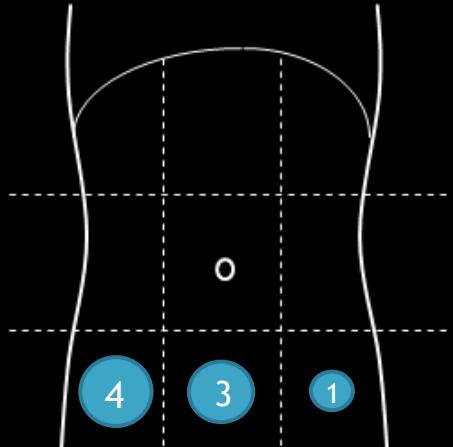
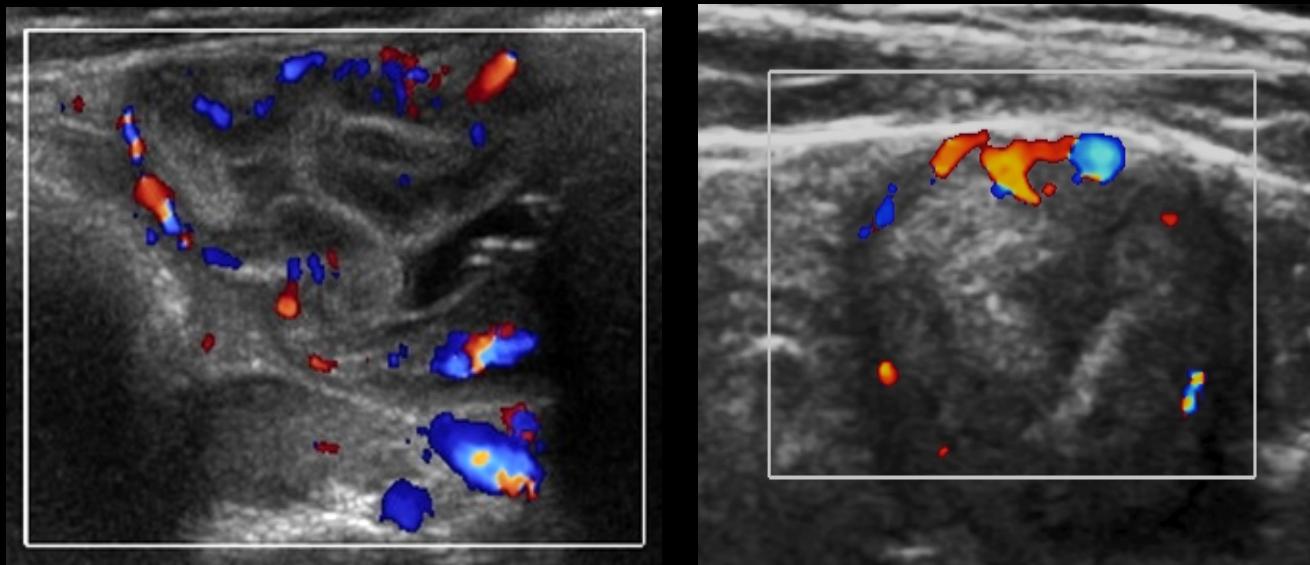
Hétérotopie nodulaire



Pseudo-anse avec nodule

Hémorragie

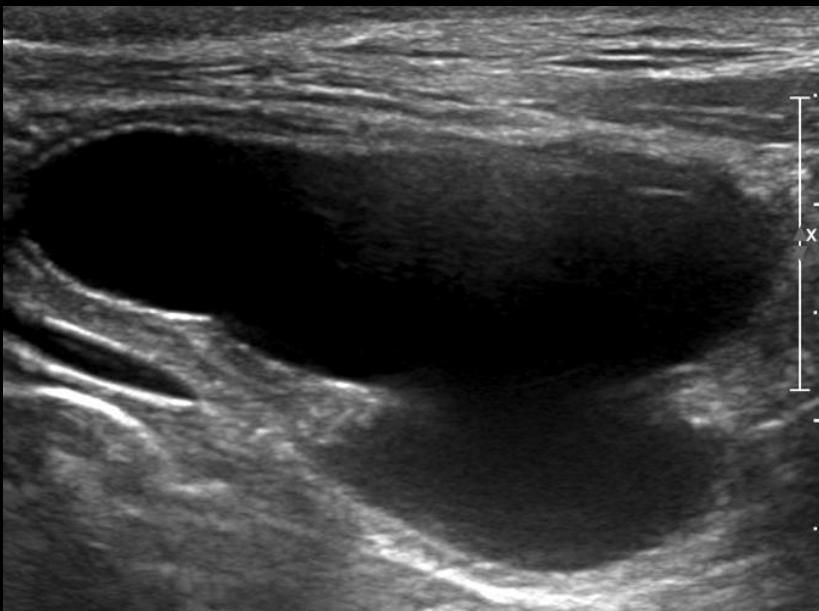
- ▶ Signes associés :
 - ▶ Hyperhémie ($n = 7$)
 - ▶ Jamais de péritonite localisée ou généralisée



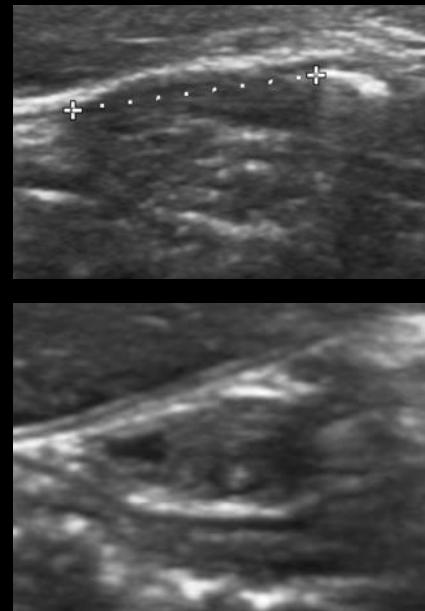
Complications

4. Volvulus intermittent du DM (n = 1)

Volvulus isolé du diverticule



Pseudo-anse liquidienne dilatée



Collet avec tour de spire intermittent

Messages clés

Invaginations

- ▶ DM renversé :
 - ▶ Tubulaire + graisse
 - ▶ Goutte + liquide
 - ▶ Raquette + liquide et/ou graisse

- ▶ Diagnostic :
 - ▶ Penser au DM devant une invagination avec signes de souffrance
 - ▶ Chercher le DM à l'apex du boudin

Occlusions

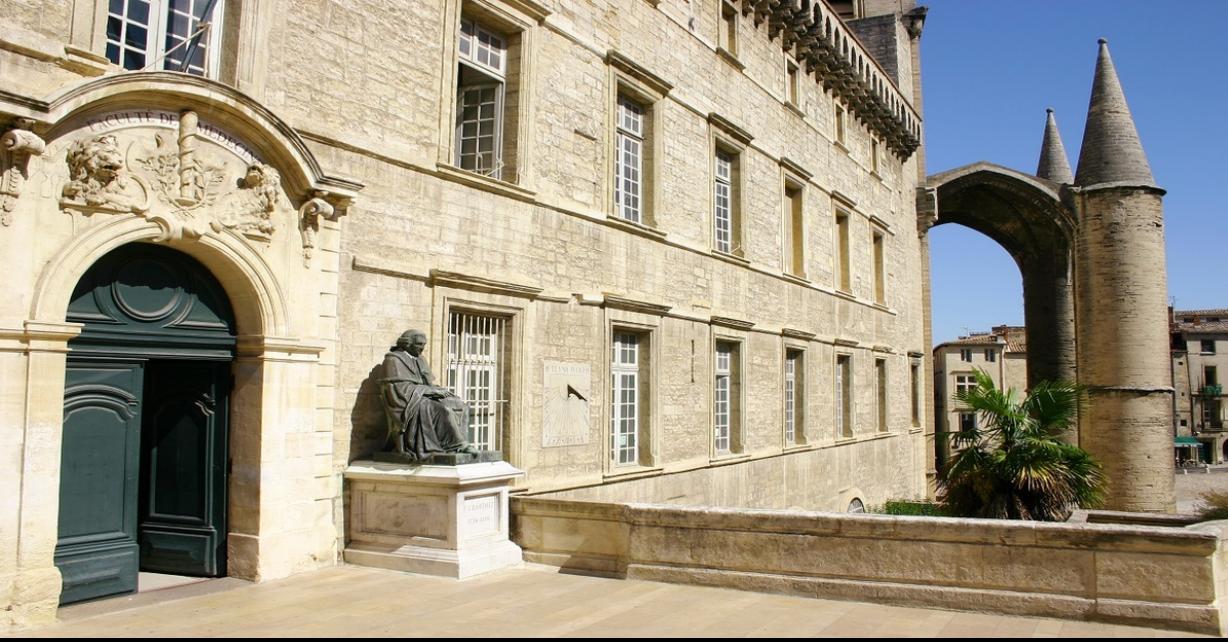
- ▶ Tout syndrome occlusif mécanique grêlique
 - ▶ Chez un enfant non opéré
 - ▶ Avec vaisseaux mésentériques en place
- ▶ Est a priori dû à une bride congénitale et potentiellement un DM

Diverticulites

- ▶ Penser au DM devant :
 - ▶ Une « anse » anormale avec péritonite
 - ▶ Une péritonite en position inhabituelle ou chez un nouveau né

Hémorragies

- ▶ Penser au DM devant toute « anse » anormale
- ▶ 100% hétérotopie gastrique fundique



Merci de votre attention

