

Méthodes d'exploration de la motricité digestive chez l'Homme

Master 2

Plan

Motricité

Propulsion

Stockage

Contraction péristaltique



Amplitude (pression),
propagation (vitesse)

Transit



propagation (vitesse)
stase (% d'évacuation)

Réservoir



Capacité (volume)
Distensibilité (compliance)

Sphincter



Tonus/ouverture (pression)

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Sphincter

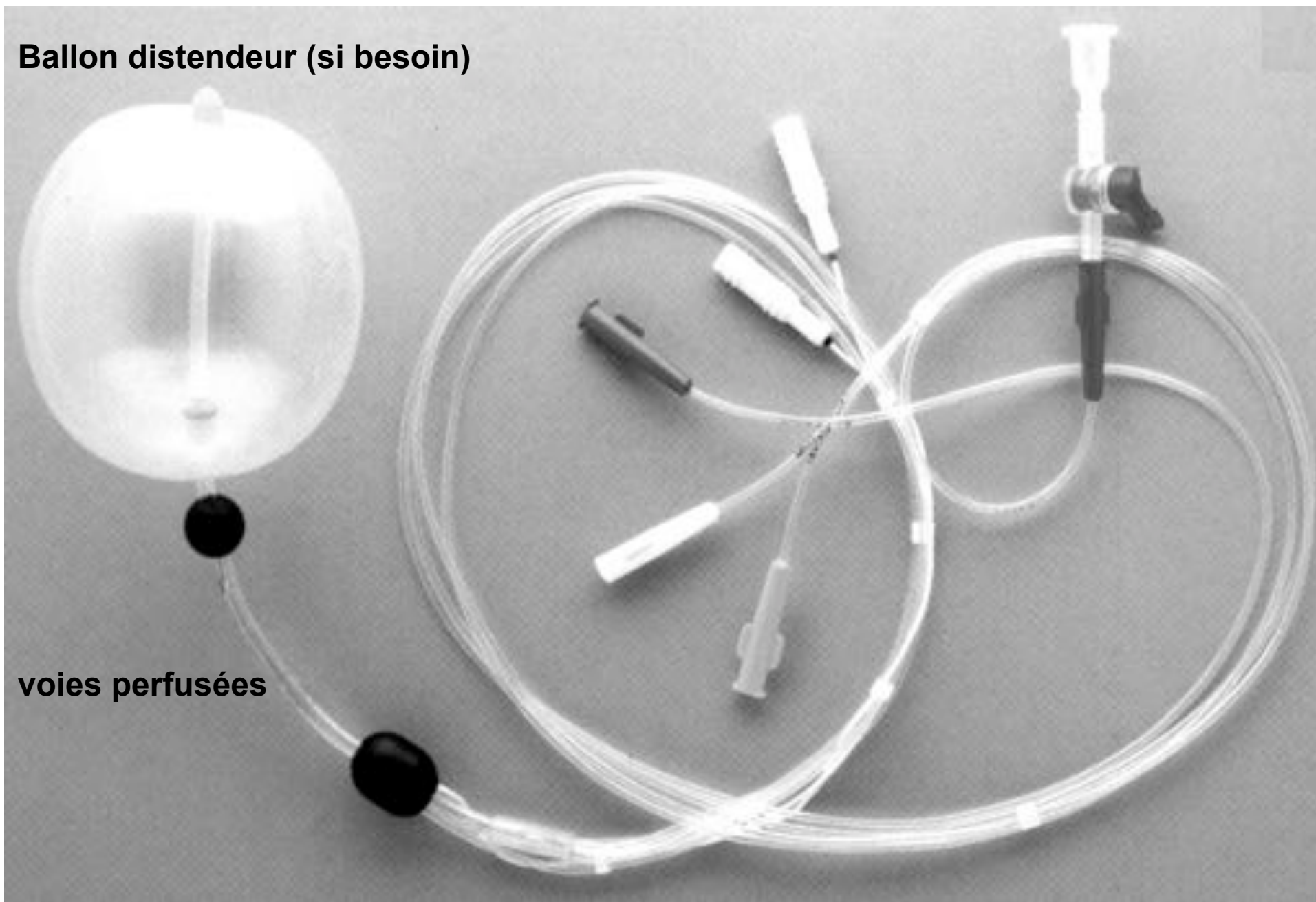


Tonus/ouverture (pression)

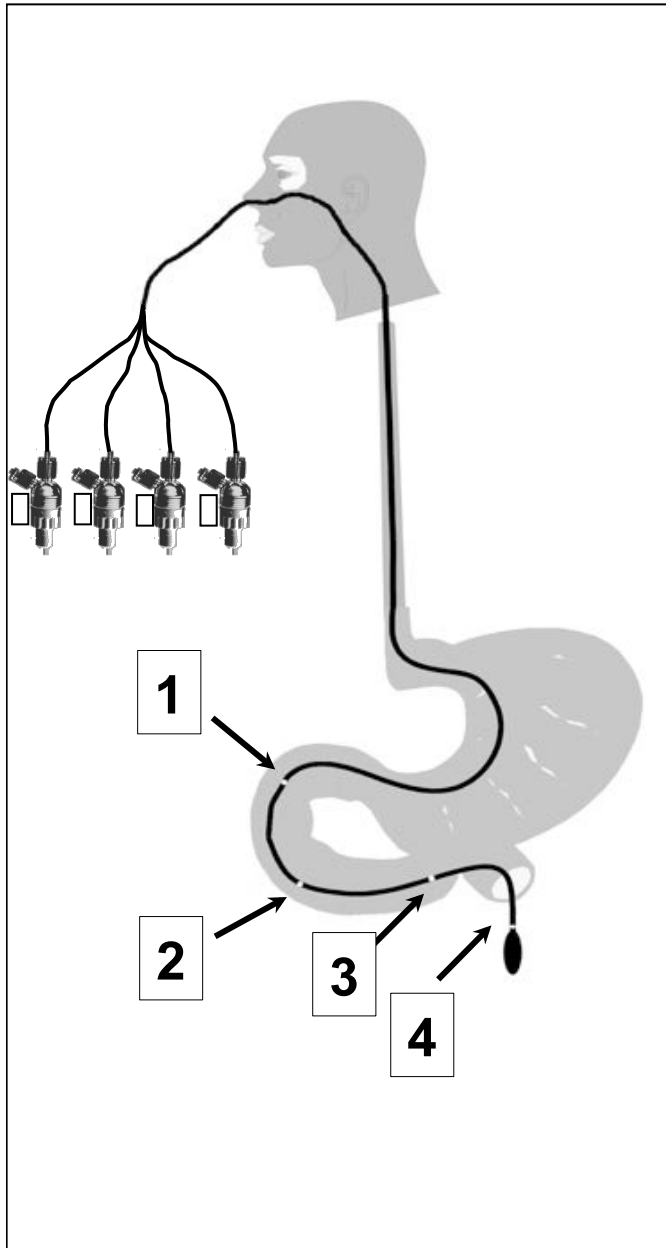
Manométrie perfusée (conventionnelle)

Ballon distendeur (si besoin)

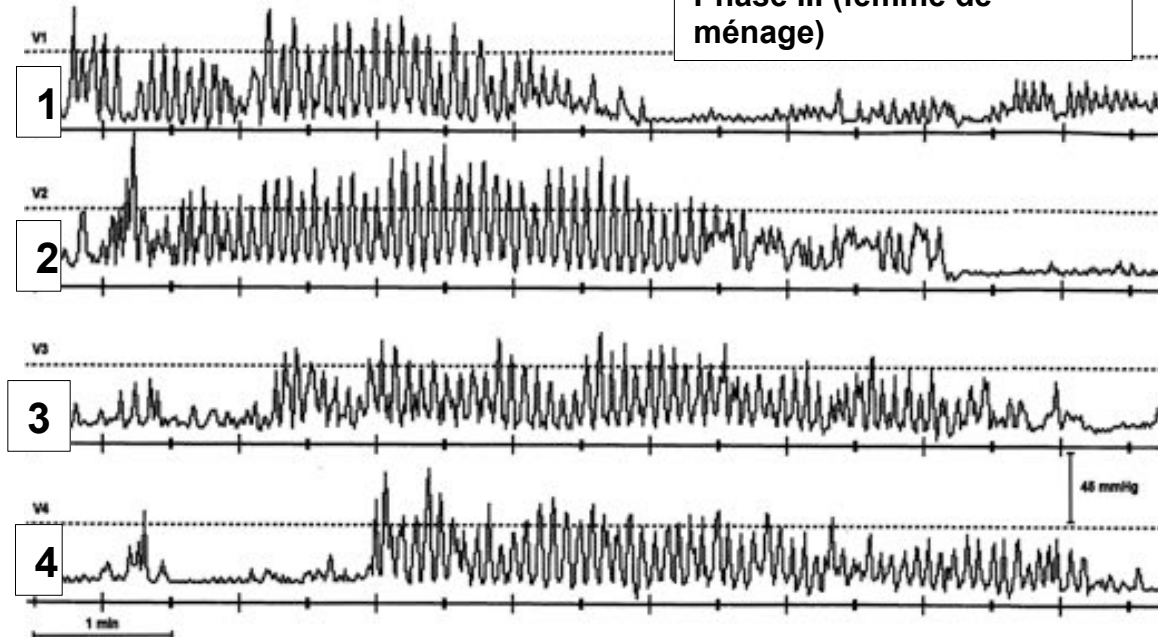
voies perfusées



MANOMETRIE DUODENO JEJUNALE



Phase III (femme de ménage)



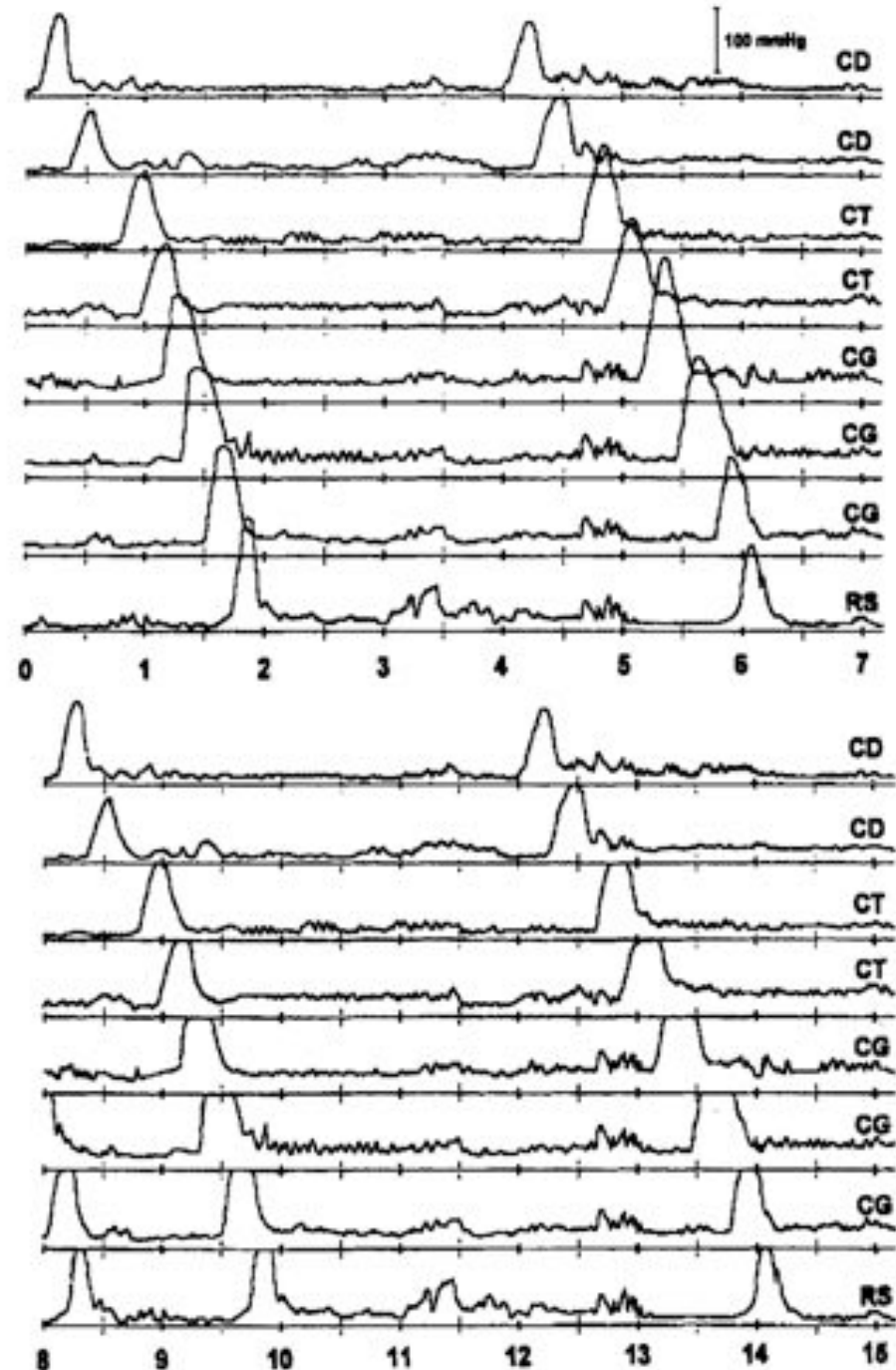
Manométrie colique



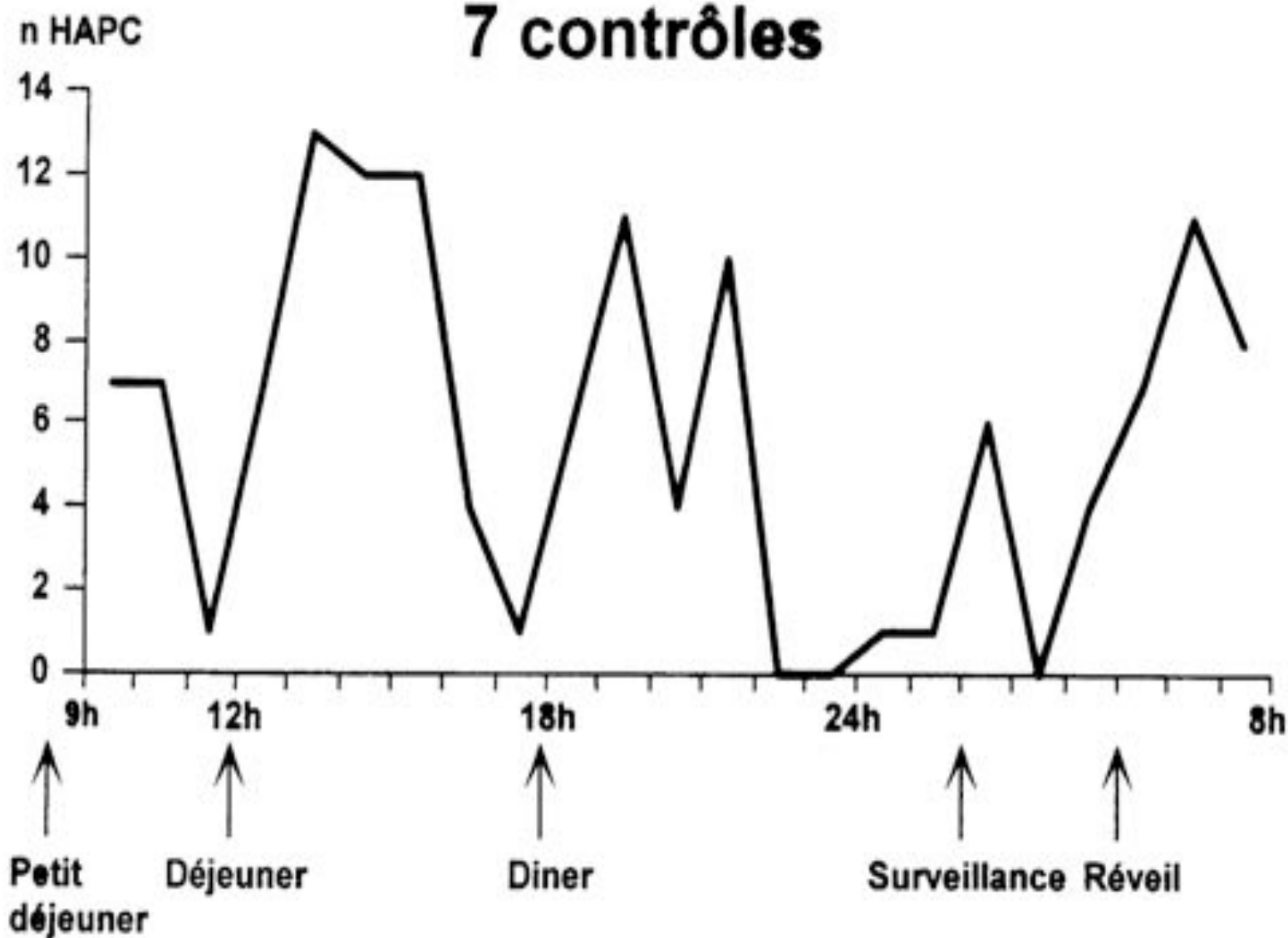


High Amplitude Propagative Contraction = HAPC (mouvement en masse)

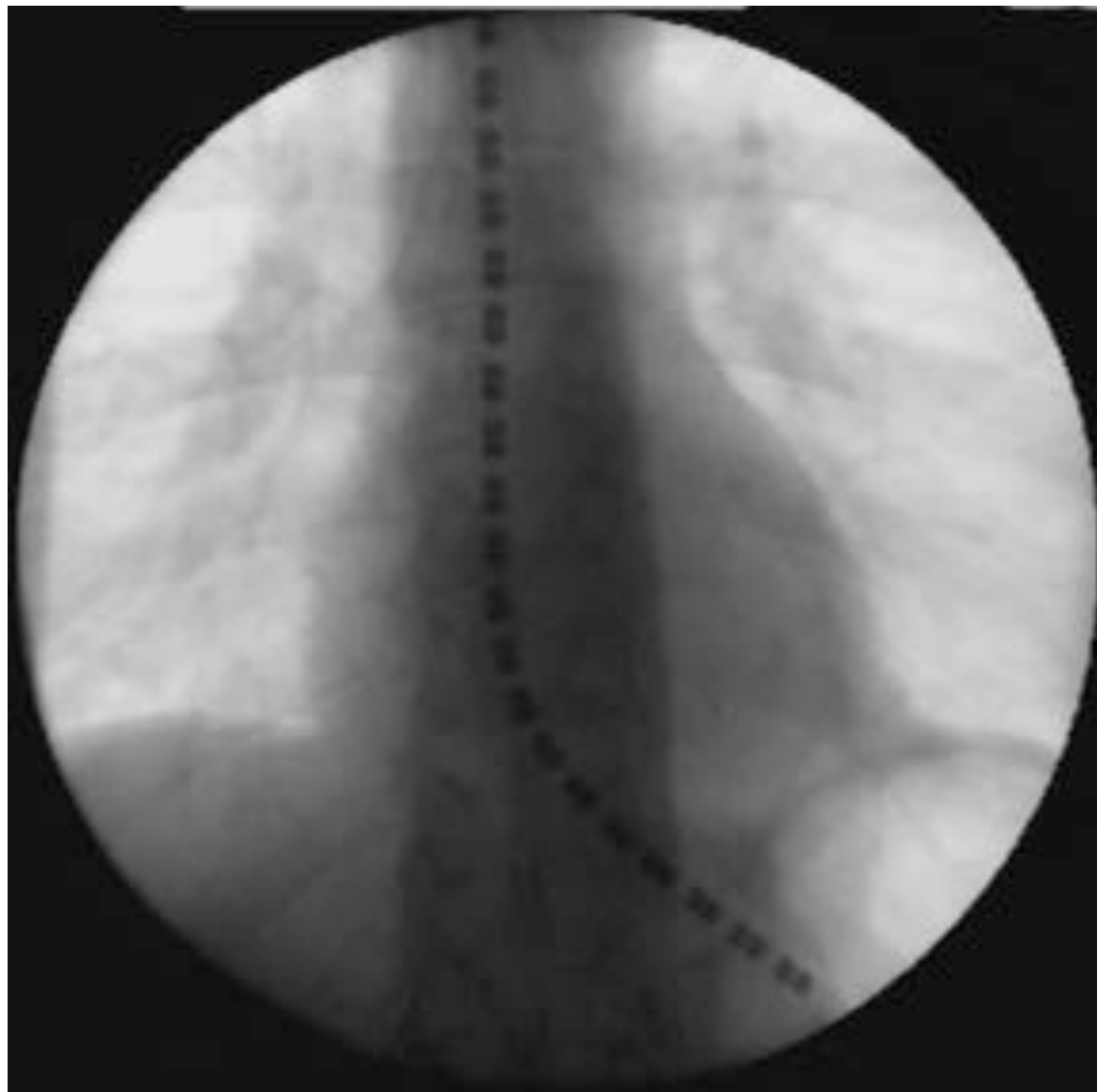
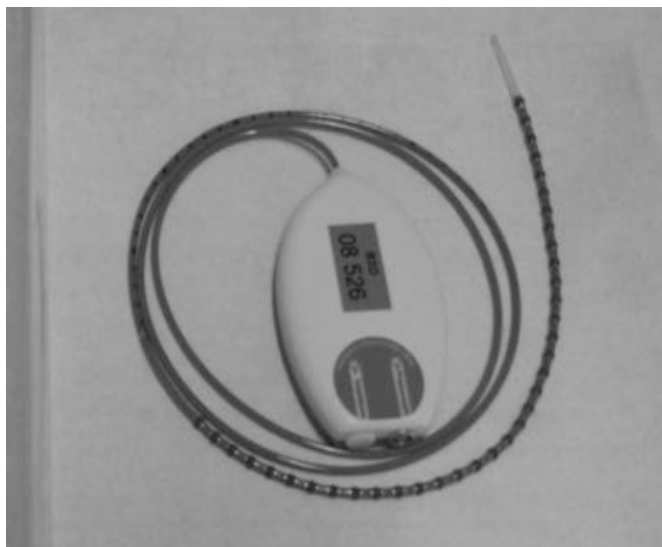
- Amplitude > 50 mm Hg
- Possible : > 200 mmHg
- Propagation > 10 cm
- Moyenne : 6 / 24 heures



7 contrôles

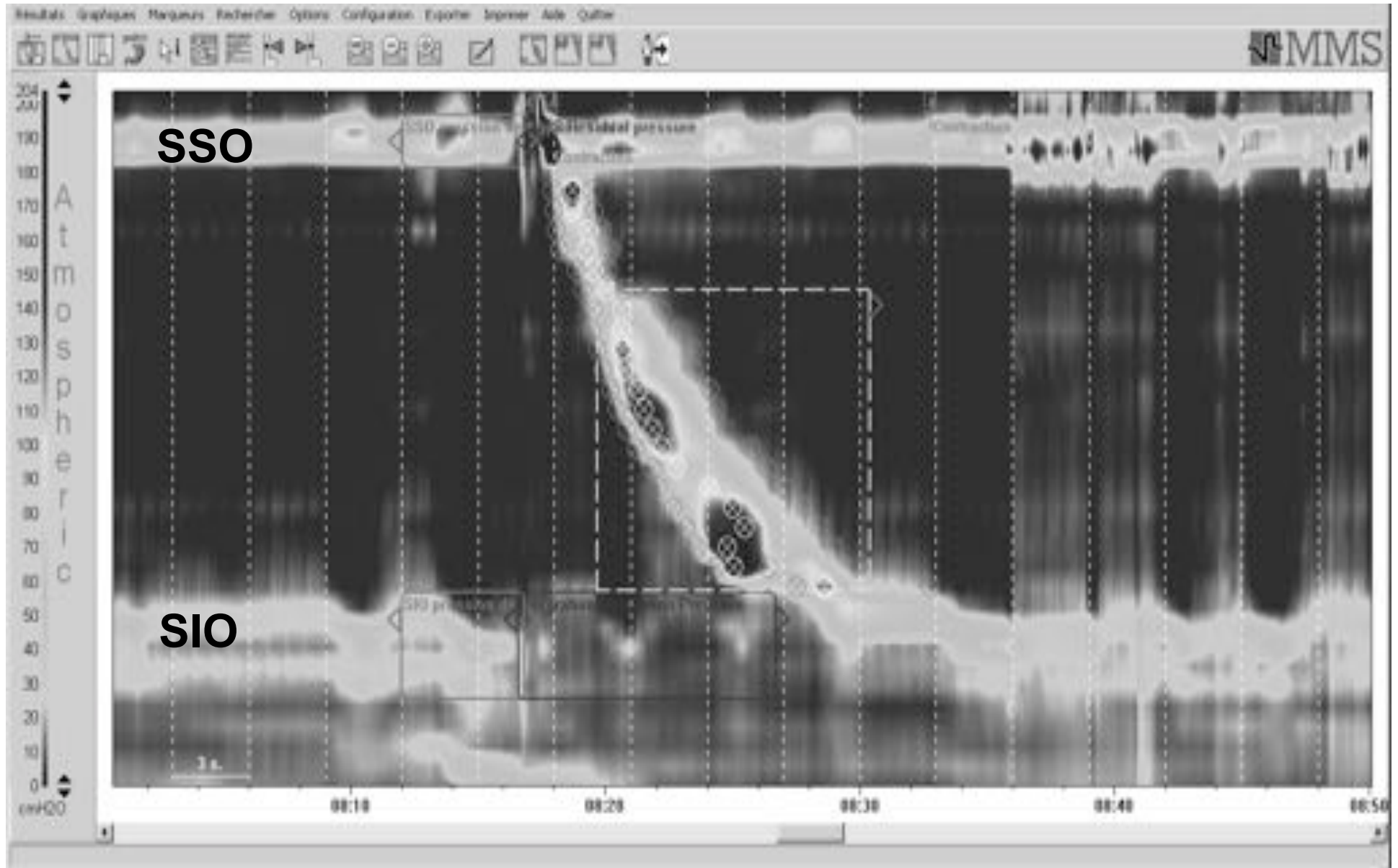


Manométrie oesophagienne haute résolution

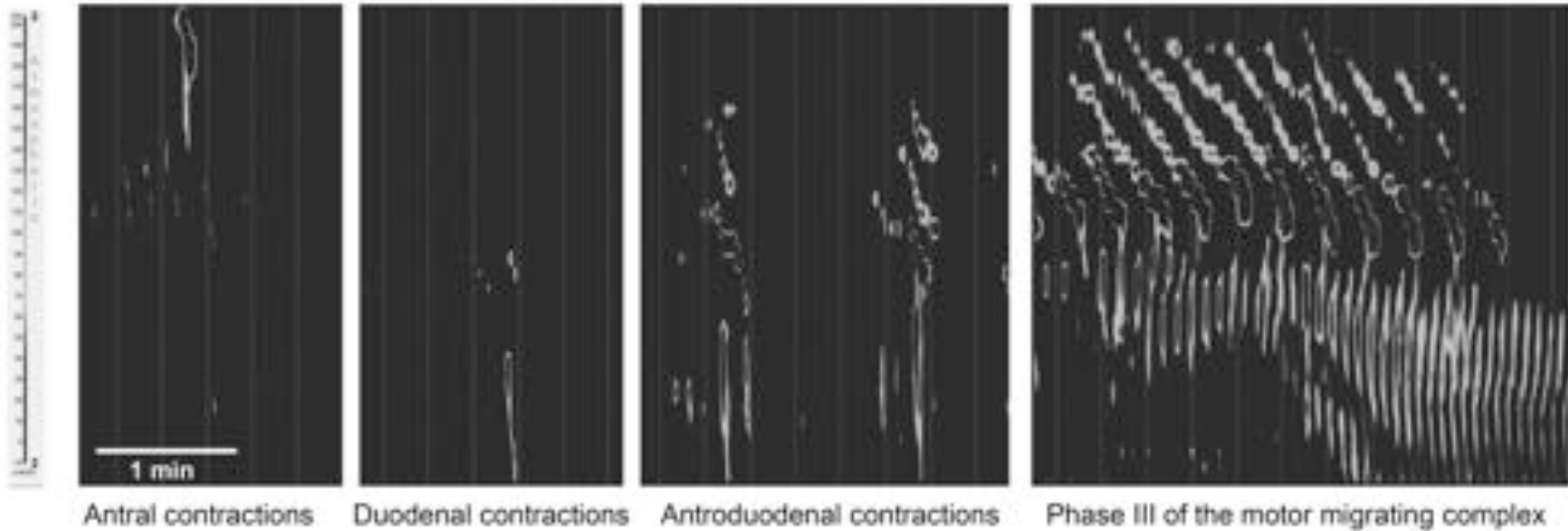


Déglutition normale

Amplitude
(mmHg)



Manométrie antro-duodénale haute résolution



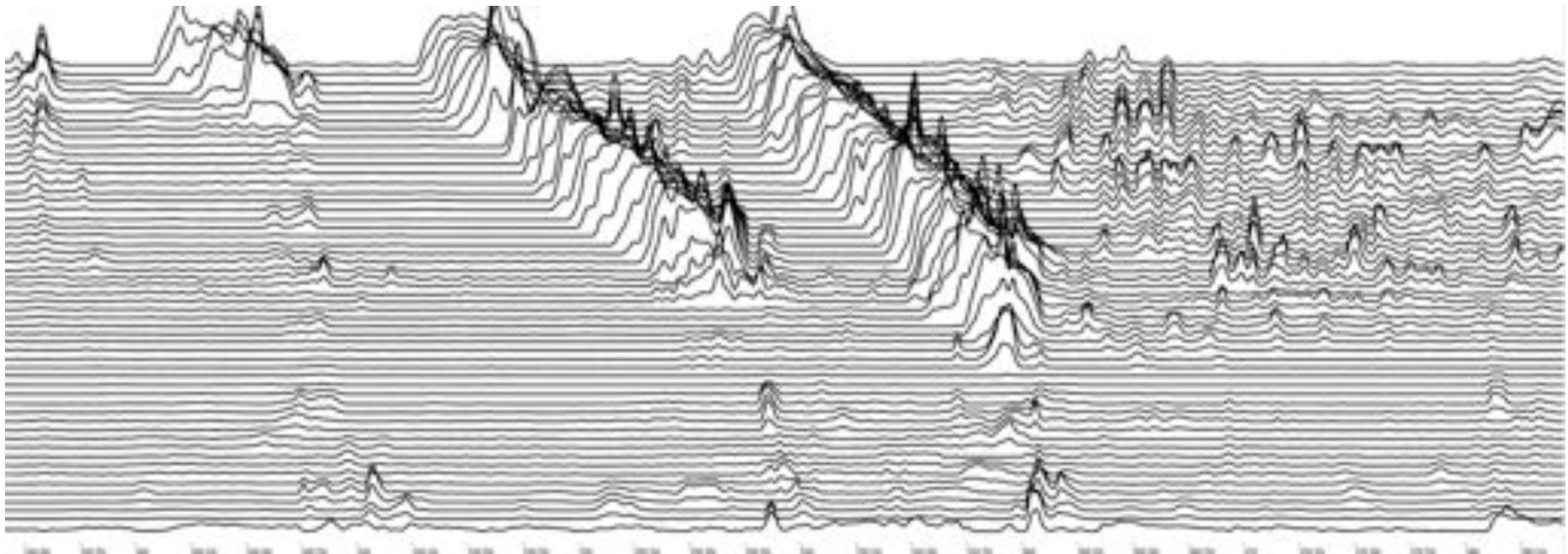
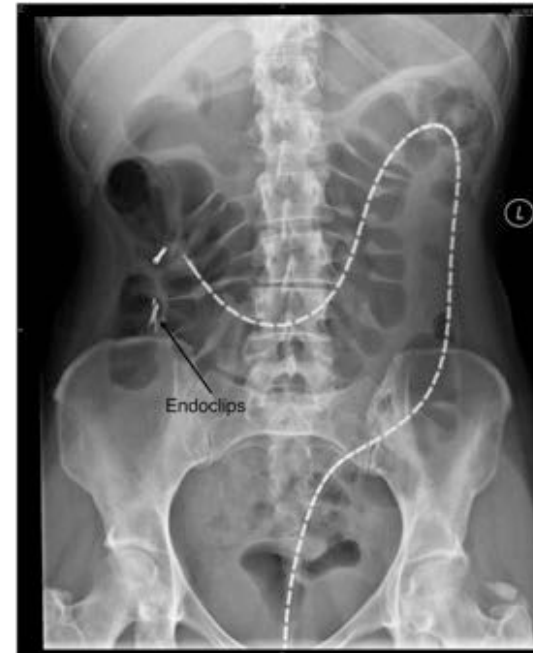
Antral contractions

Duodenal contractions

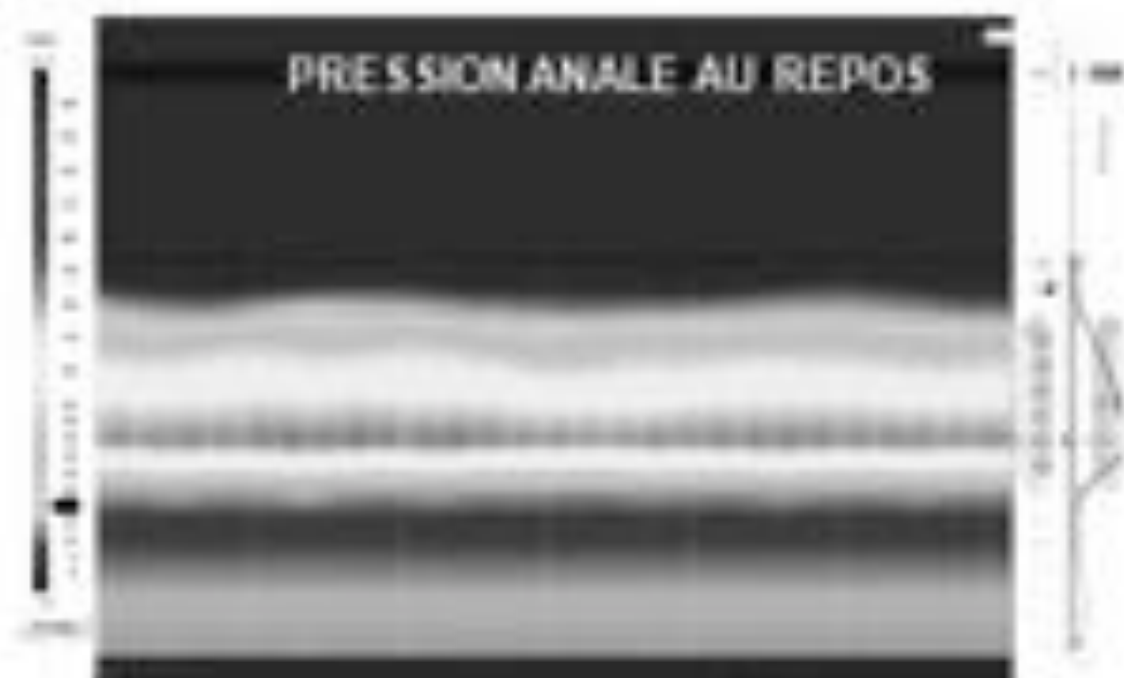
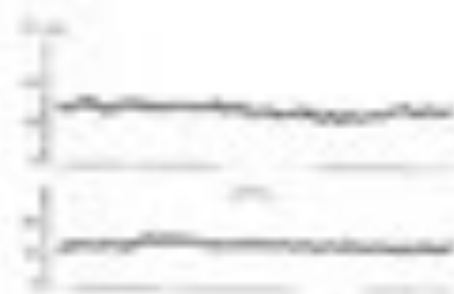
Antroduodenal contractions

Phase III of the motor migrating complex

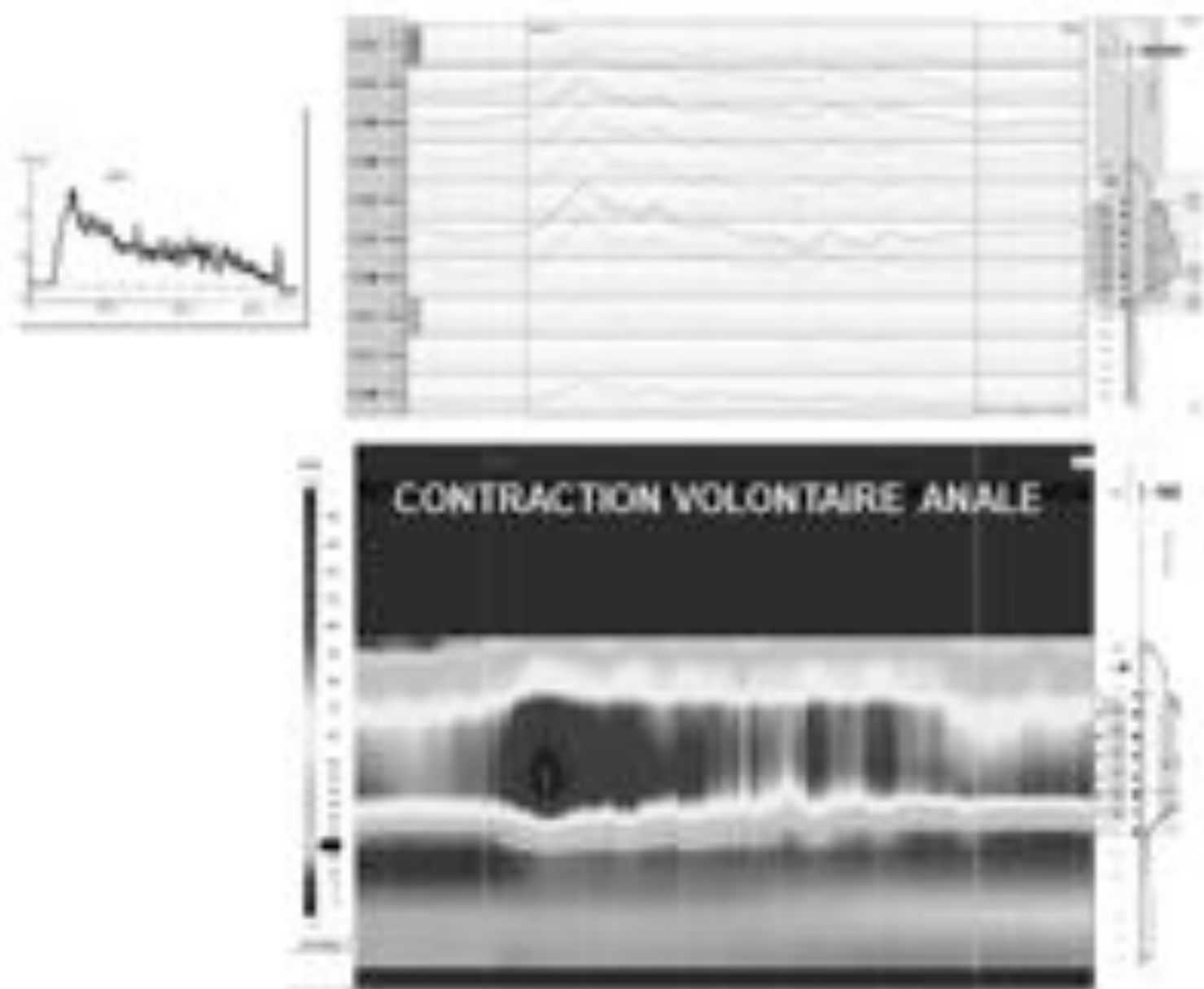
Manométrie colique haute résolution



Manométrie anorectale haute-résolution: les résultats



Manométrie anorectale haute-résolution: les résultats



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**propagation (vitesse)
stase (% d'évacuation)**

Réservoir



**Capacité (volume)
Distensibilité (compliance)**

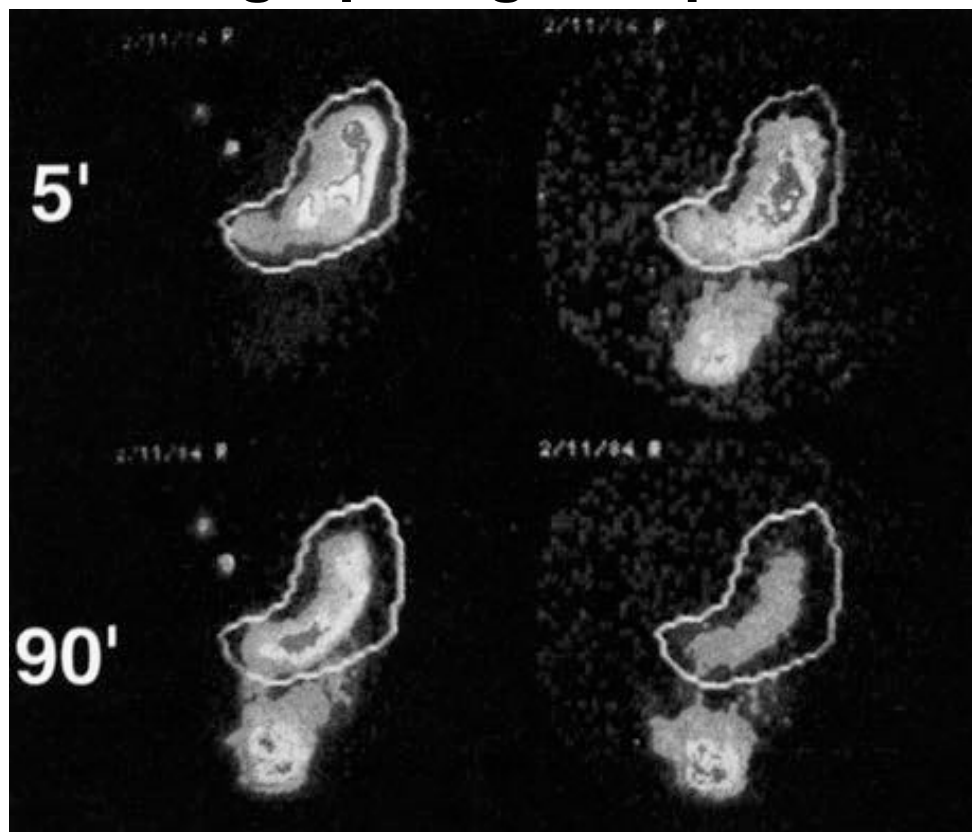
Sphincter



Tonus/ouverture (pression)

Mesure de la vidange gastrique

Scintigraphie gastrique



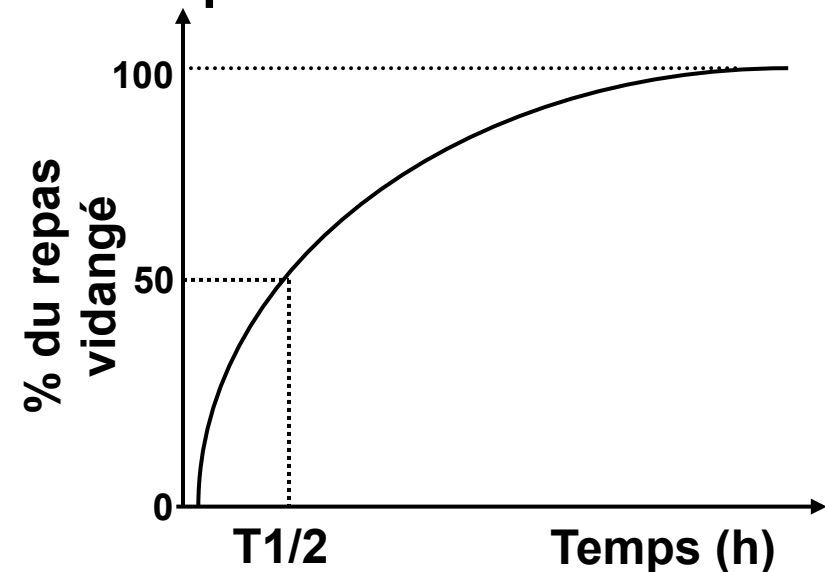
Solides

Liquides

Repas marqué:

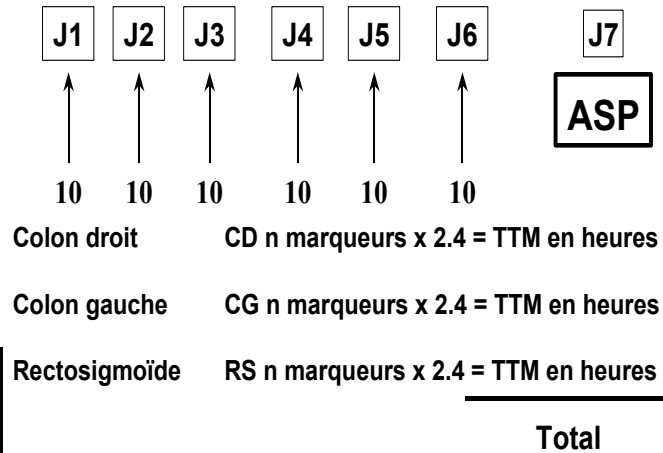
-au Technetium 99 pour les solides

À l'Indium 111 pour les liquides



Temps de transit des marqueurs (colon/estomac)

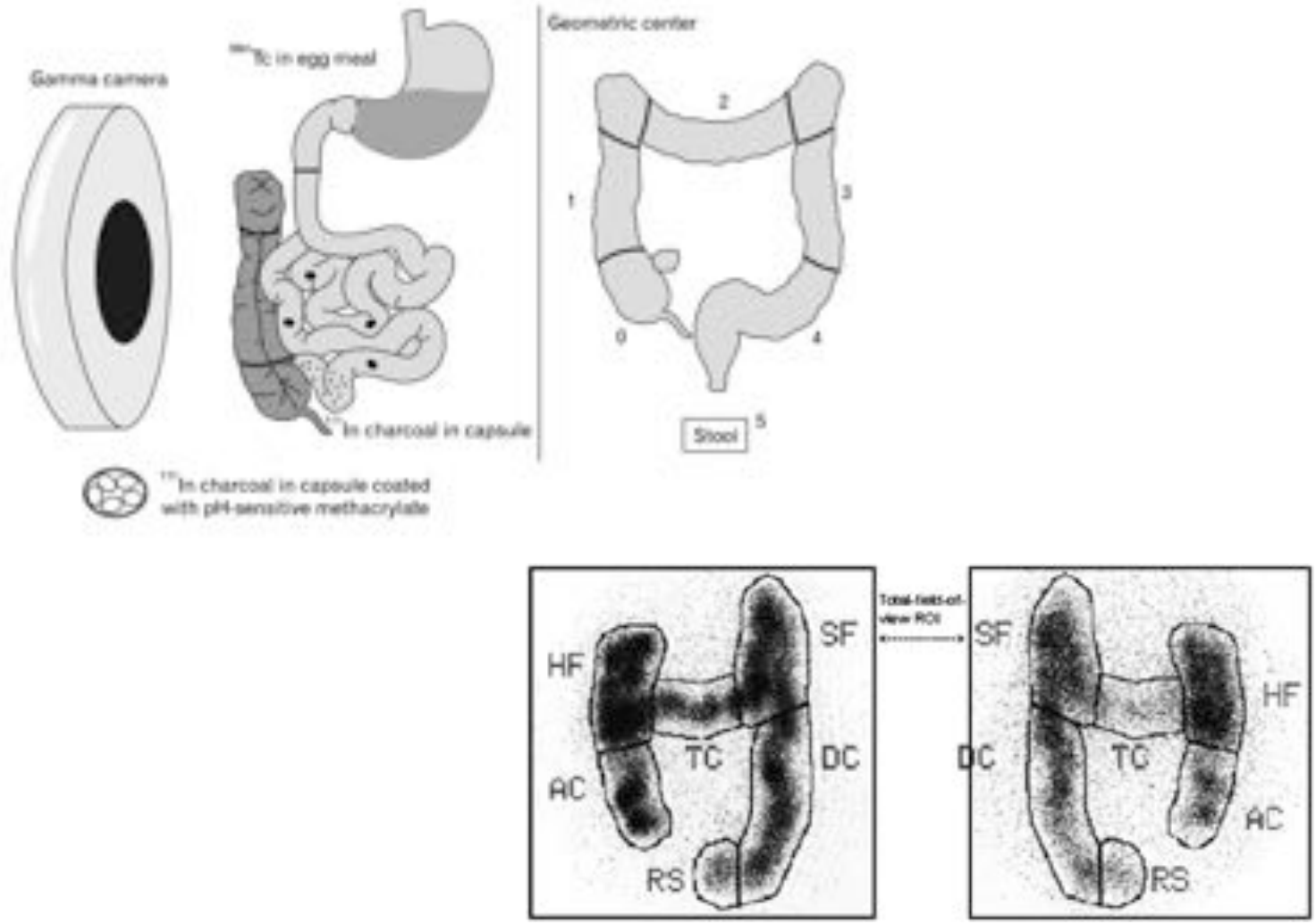
Temps de transit des marqueurs



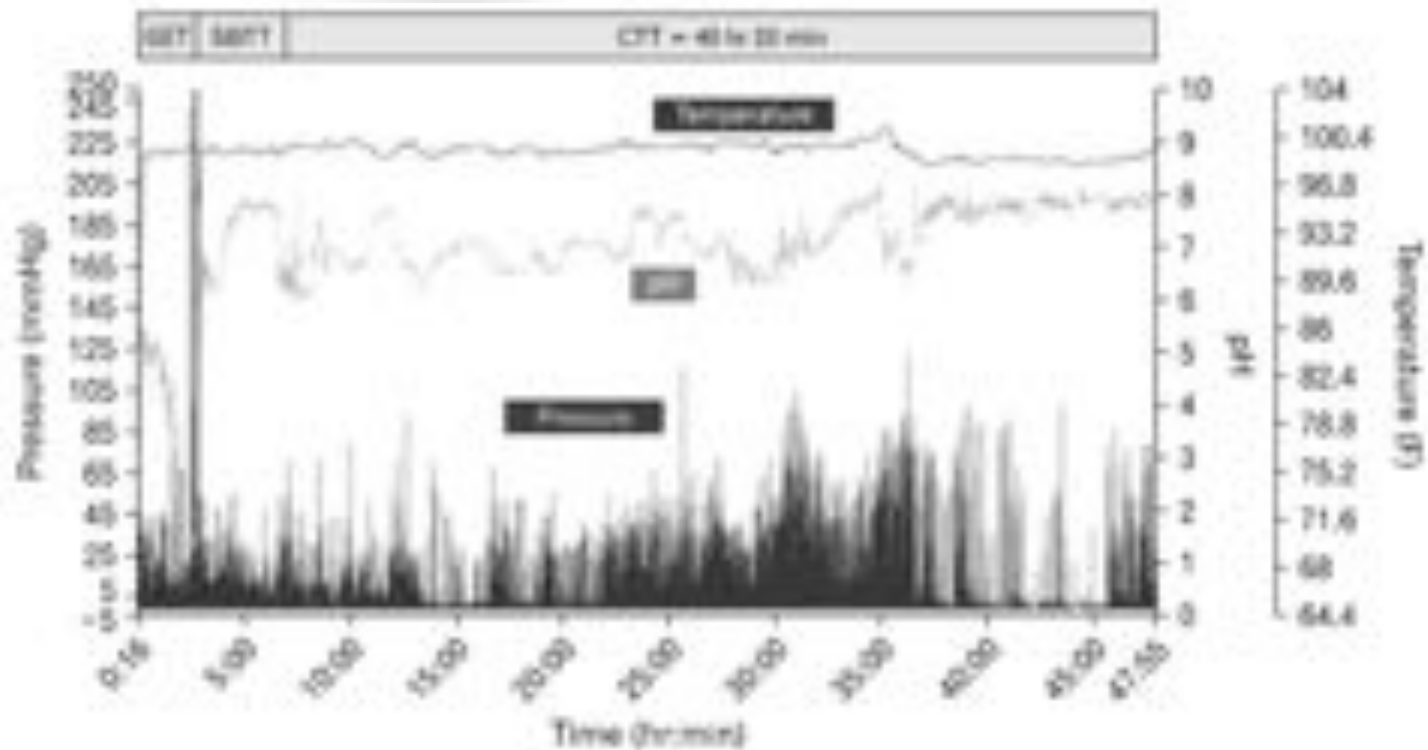
ASP = Abdomen Sans Préparation



Scintigraphie colique



Capsule endoscopique (Smartpill®)



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Réservoir

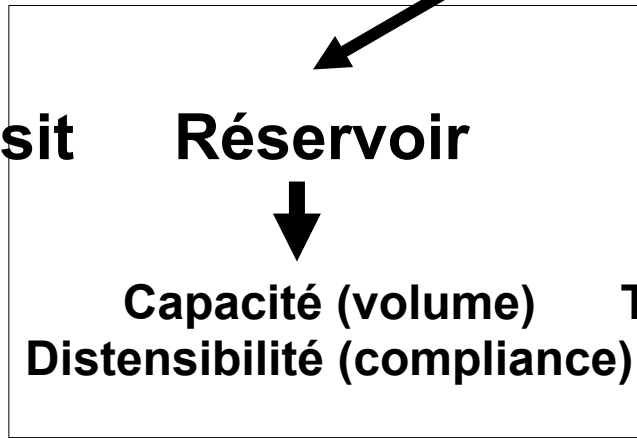


**Capacité (volume)
Distensibilité (compliance)**

Sphincter

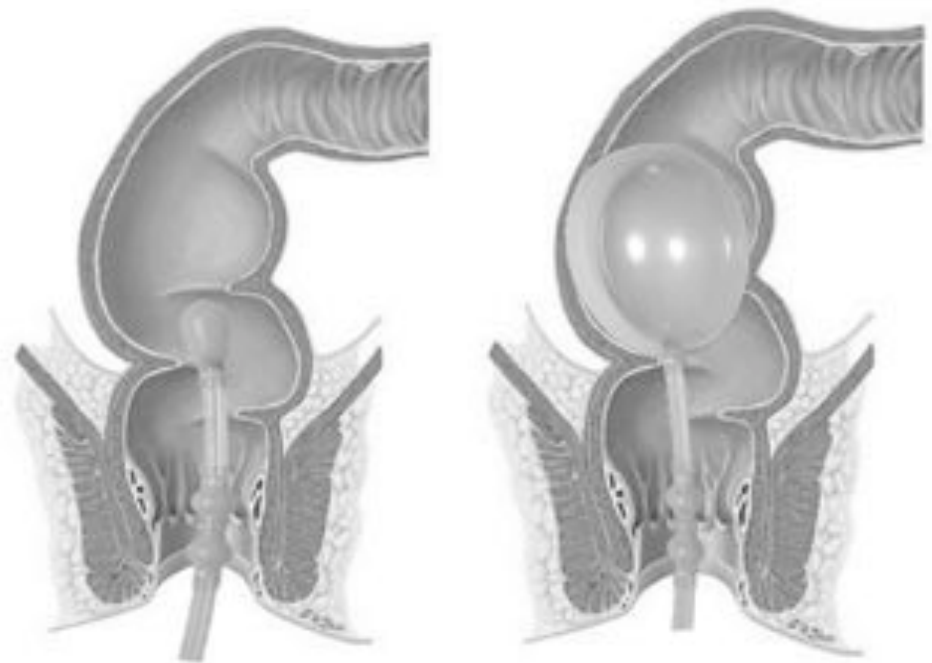


Tonus/ouverture (pression)

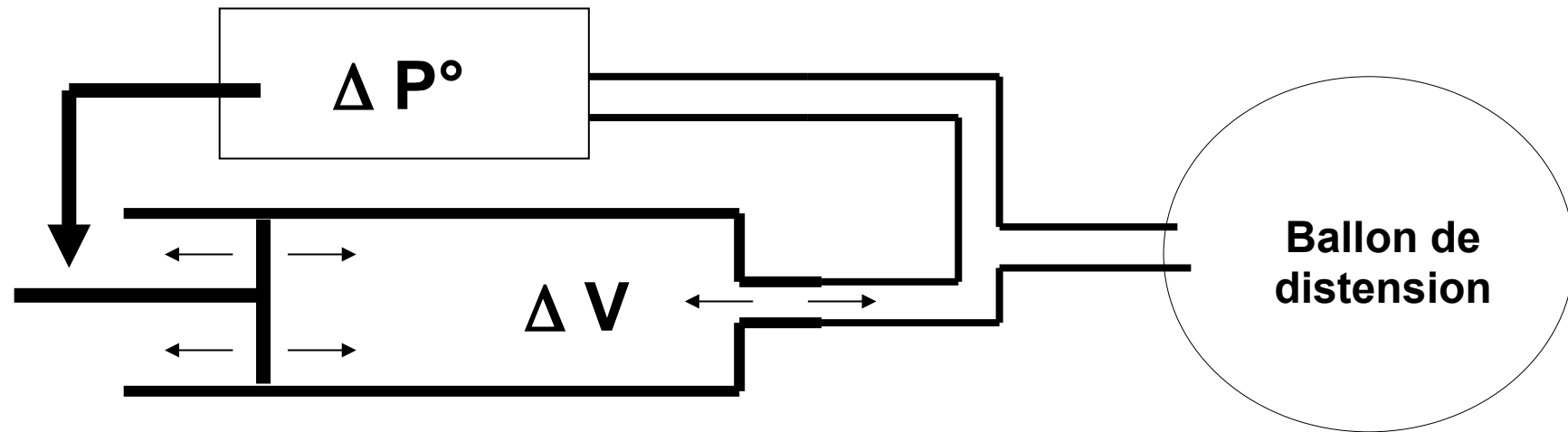


Le Ballon

- Ballon en latex:
 - Mesure la sensation et la pression pour un volume imposé par l'expérimentateur
 - Simple, peu coûteux, pas de volume limite
 - Mais
 - Compliant
 - Ne peut pas mesurer
Les changements
de volume



Barostat



→ **Pression constante à l'intérieur du ballon**

→ **Distensions isobariques**

BAROSTAT

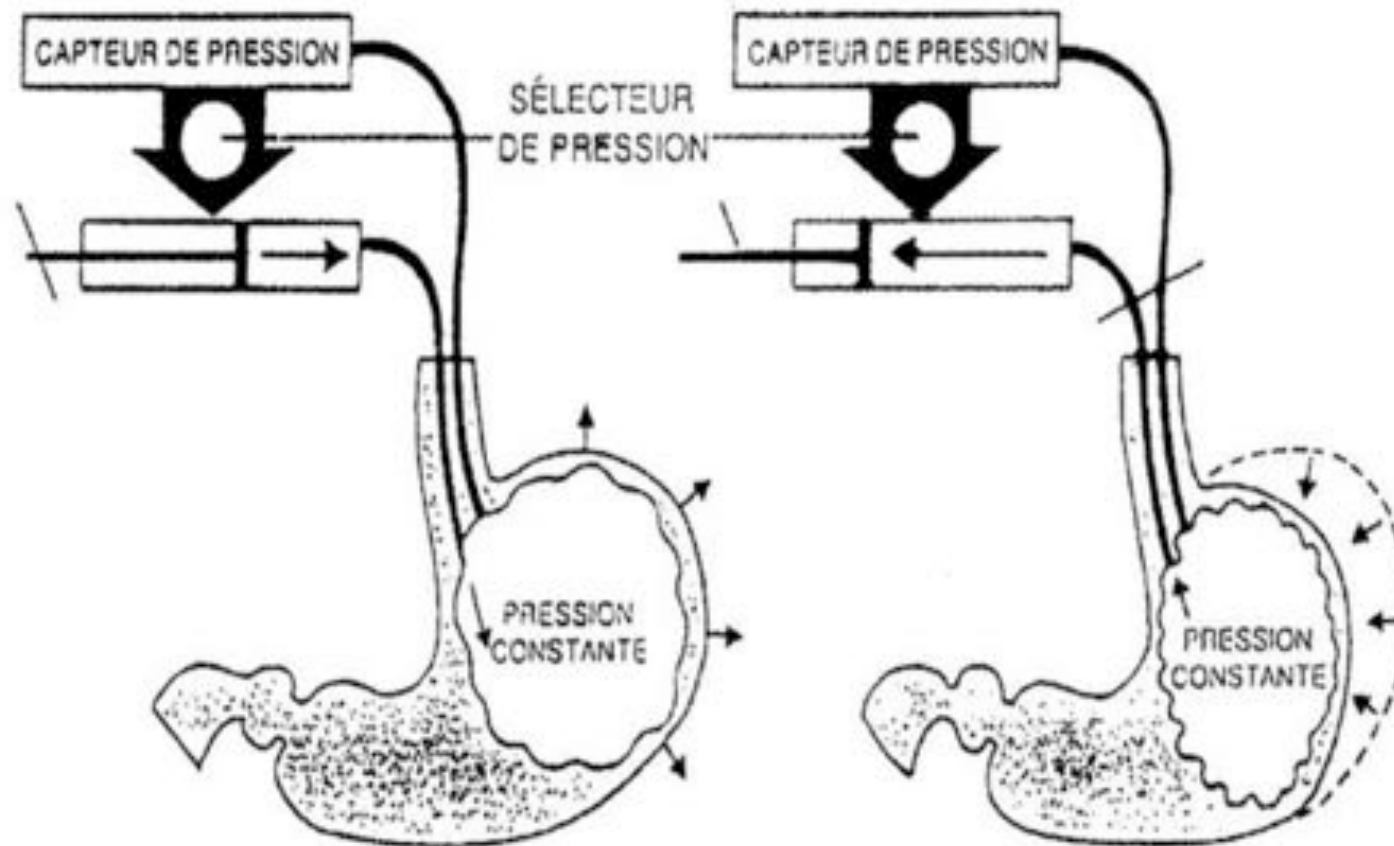
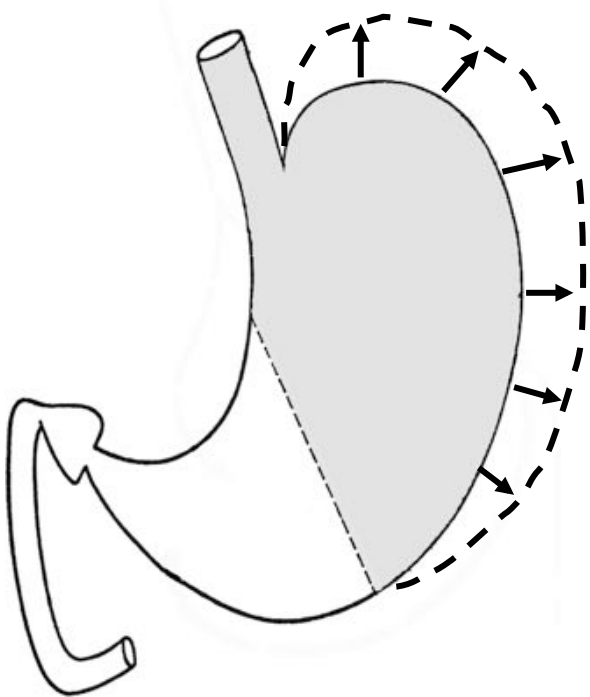


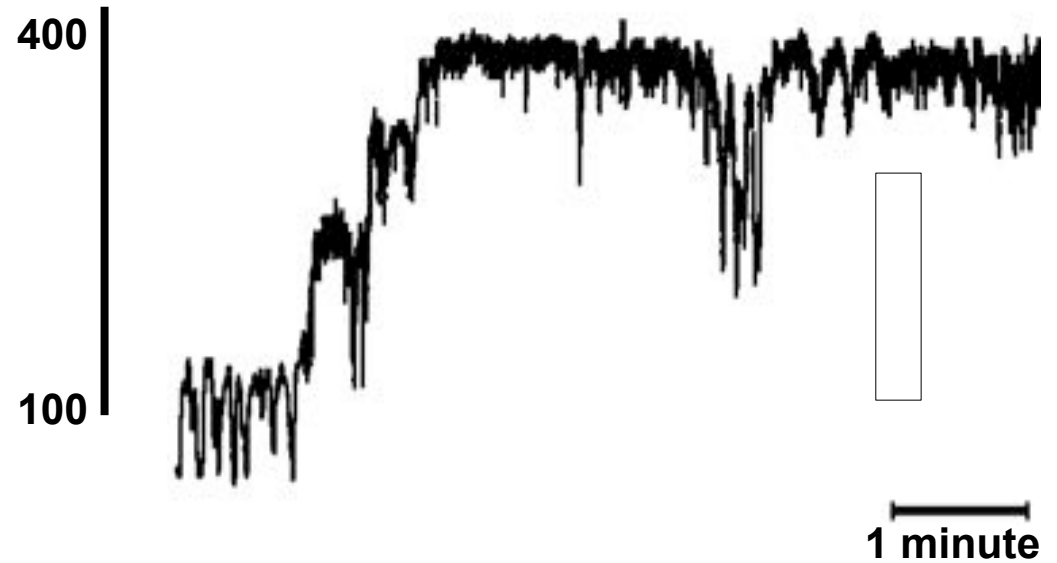
Figure 12: Principe de fonctionnement du barostat.
D'après Azpiroz et Malagelada, 1985.

Exemple: Motricité tonique gastrique: barostat

Relaxation



Volume
gastrique en ml



repas

Exemple: relaxation rectale après distension colique



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**propagation (vitesse)
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Réservoir

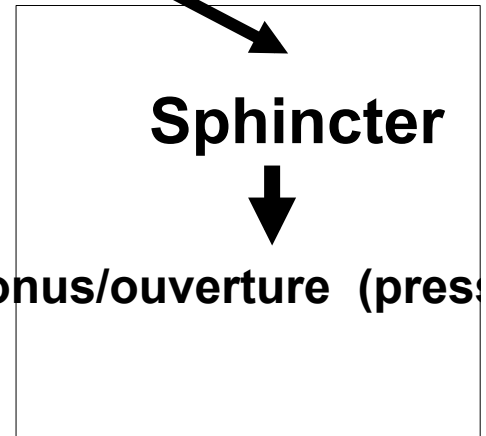


**Capacité (volume)
Distensibilité (compliance)**

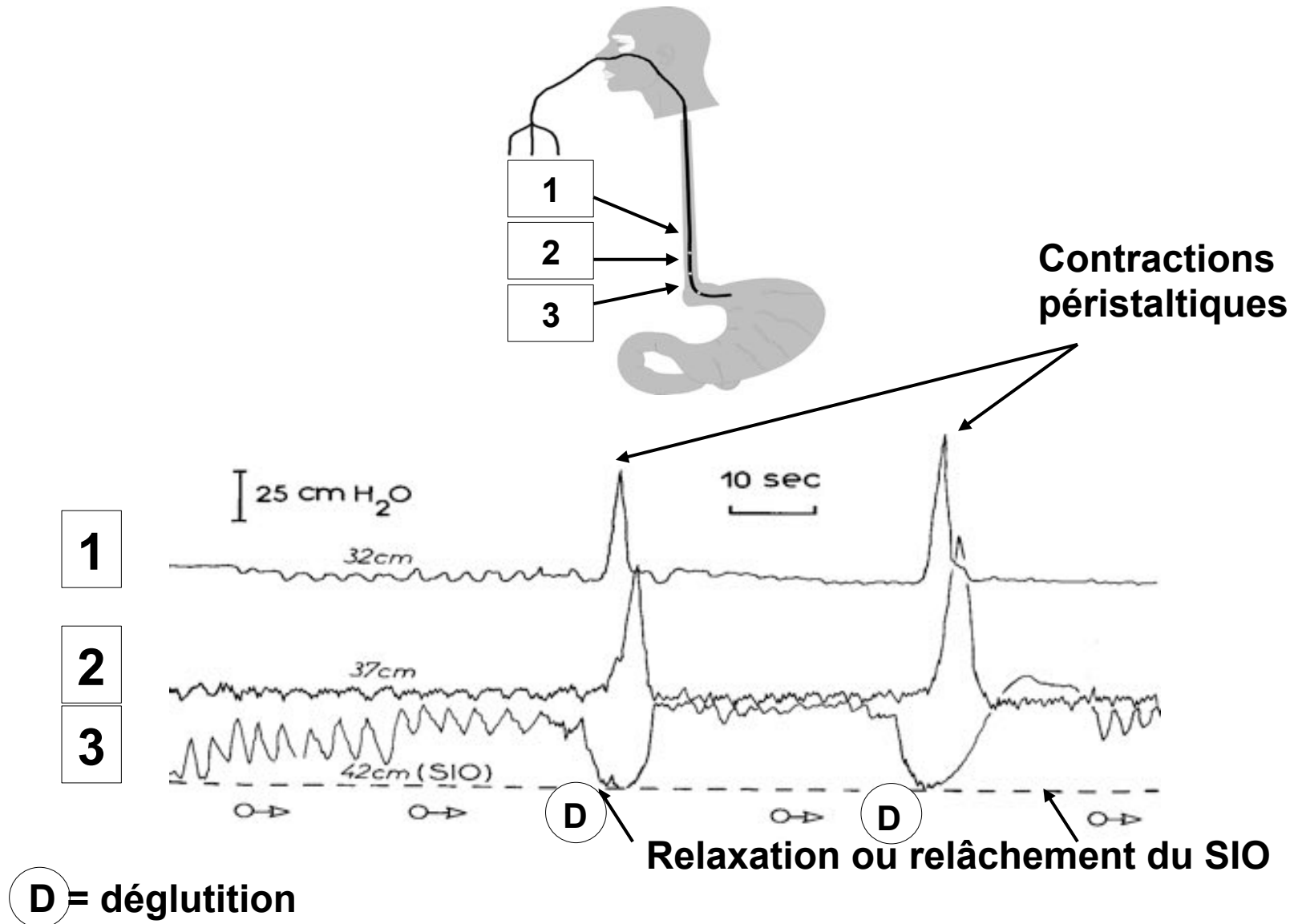
Sphincter

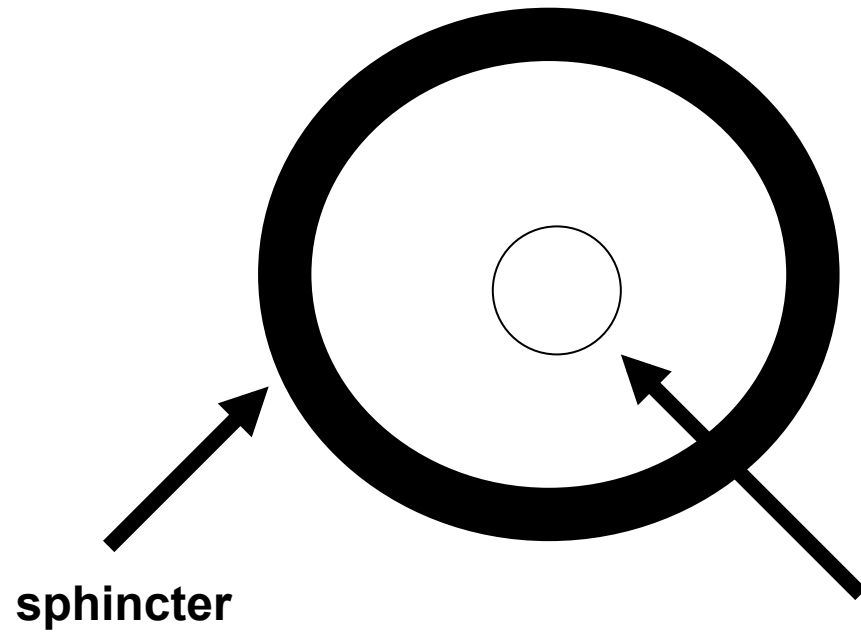


Tonus/ouverture (pression)

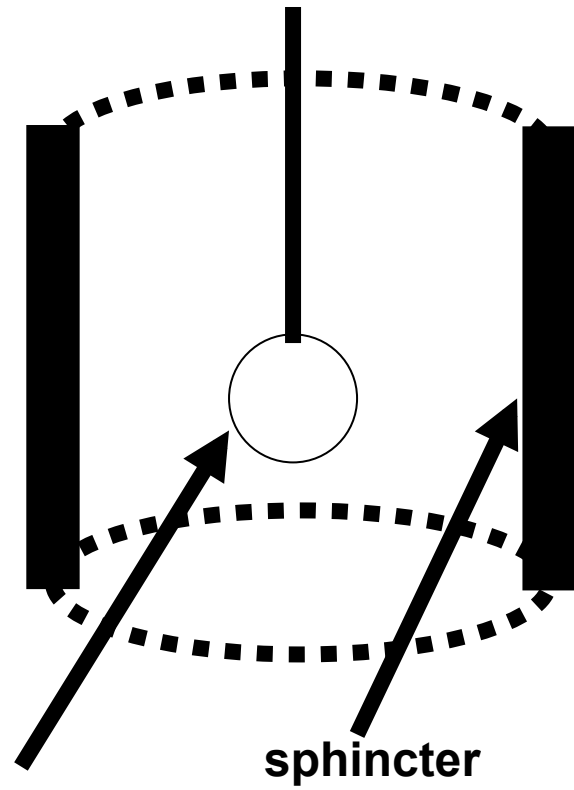


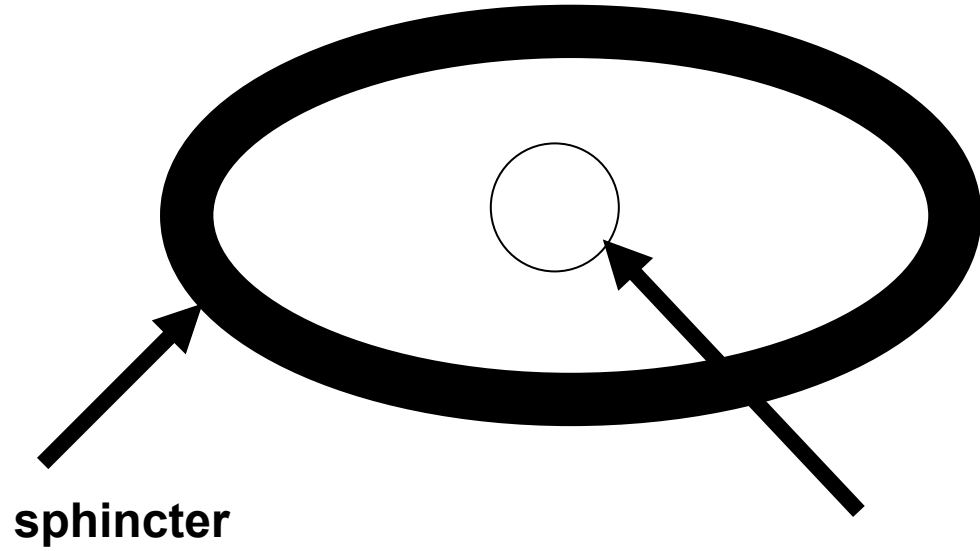
Manométrie perfusée : exemple avec le SIO





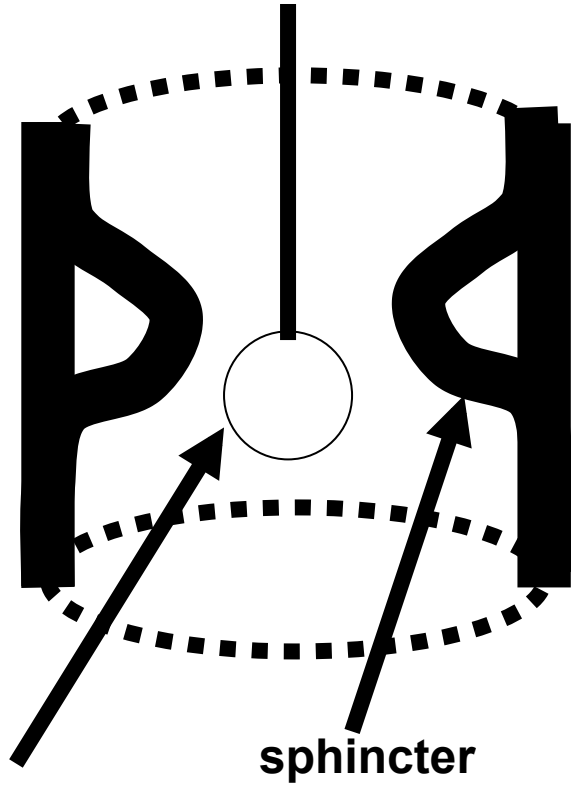
Capteur de pression



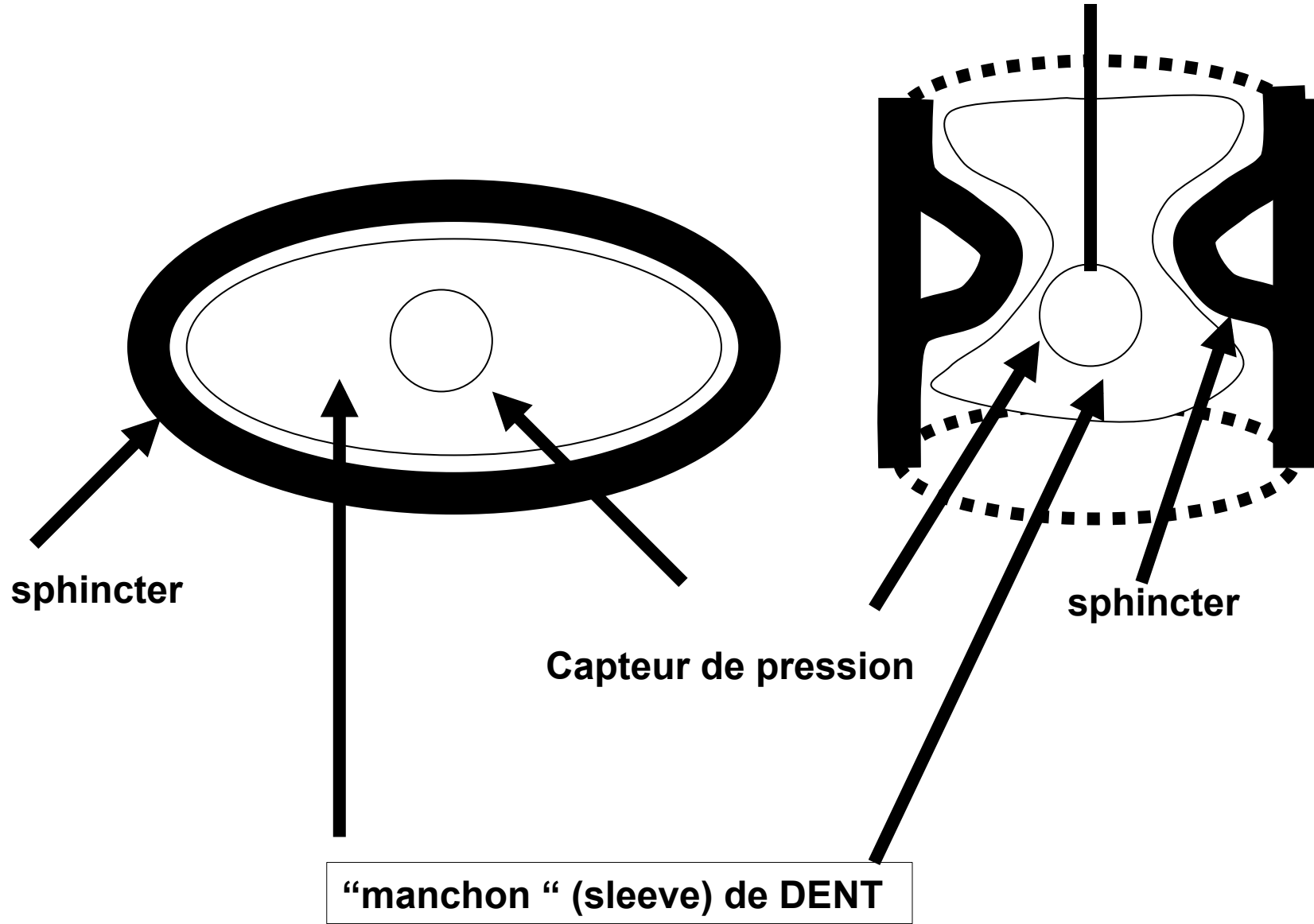


sphincter

Capteur de pression



sphincter



Différents types de sondes pour manométrie oesophagienne: la différence = sphincter



8-channel
sidehole



8-channel
sleeve and
sidehole



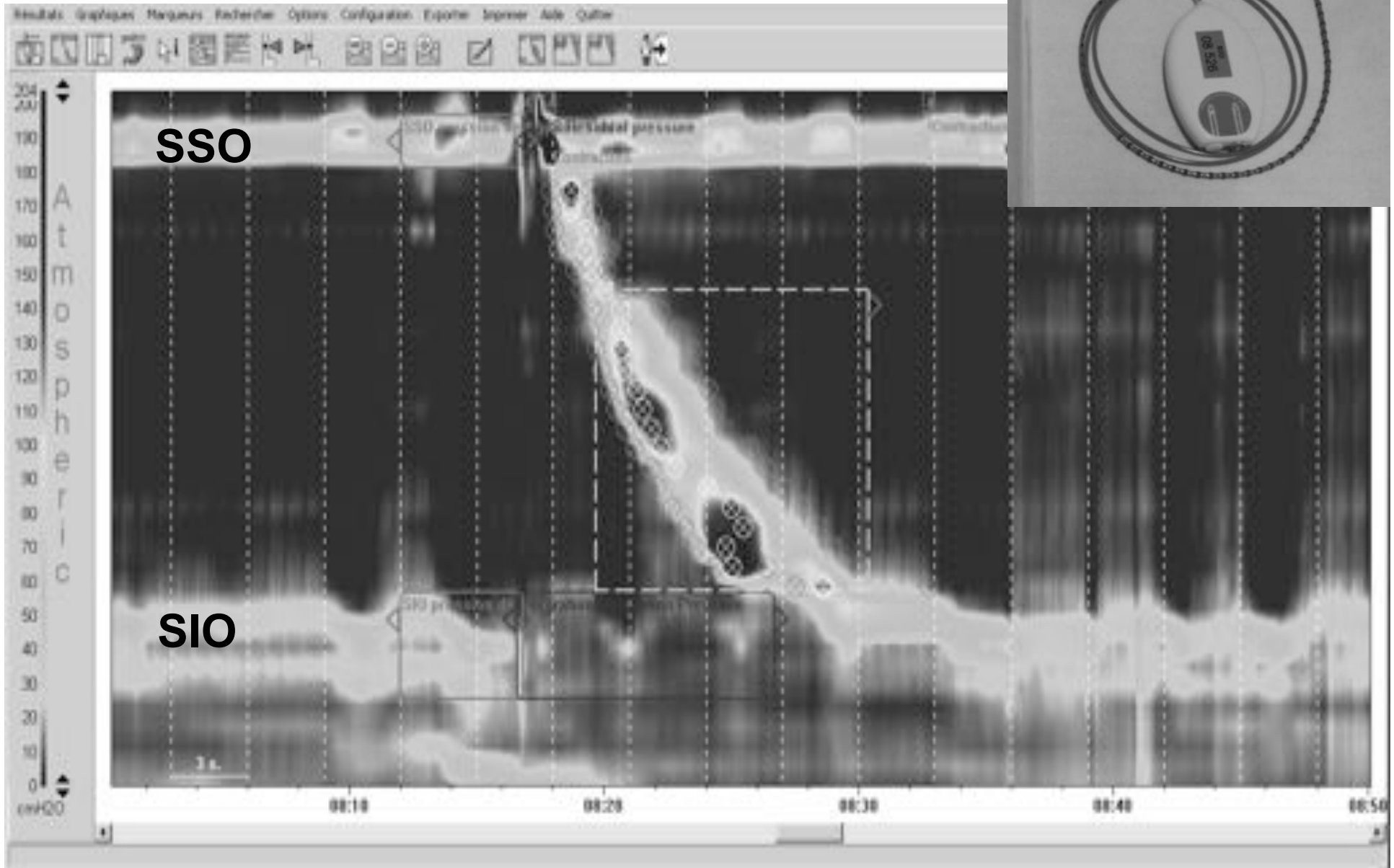
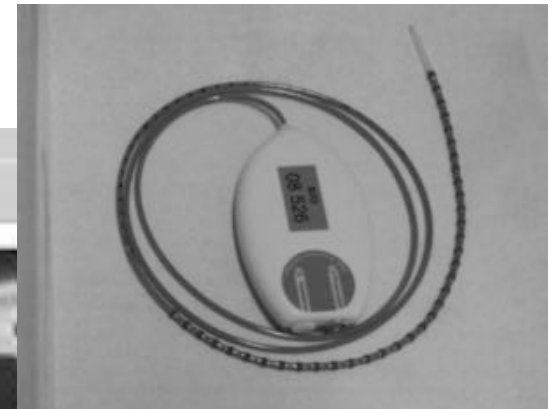
10-channel
sleeve and
sidehole



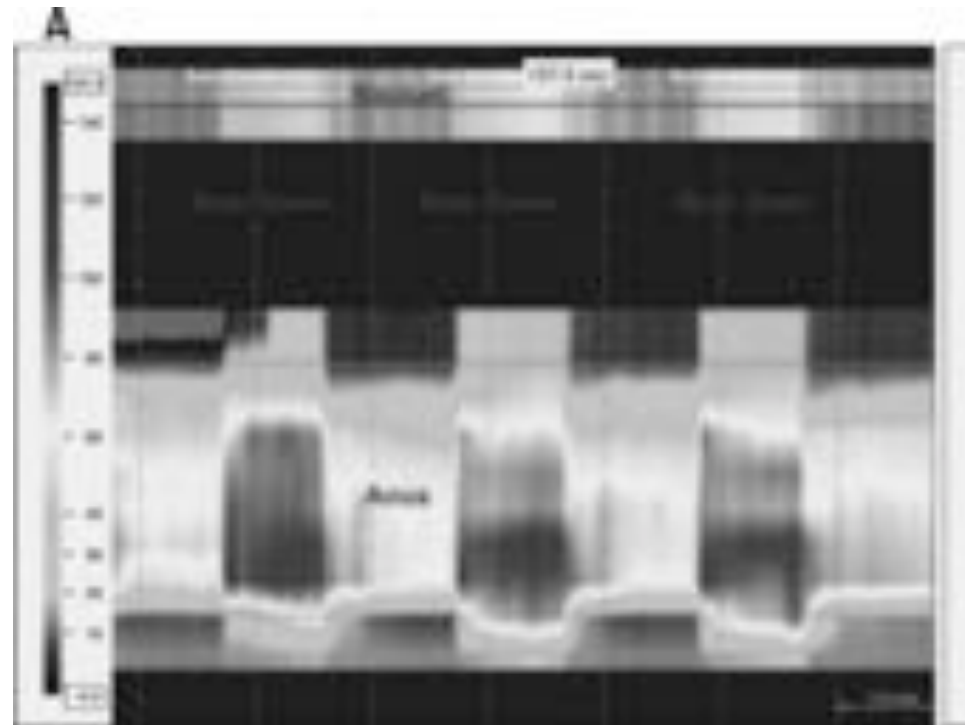
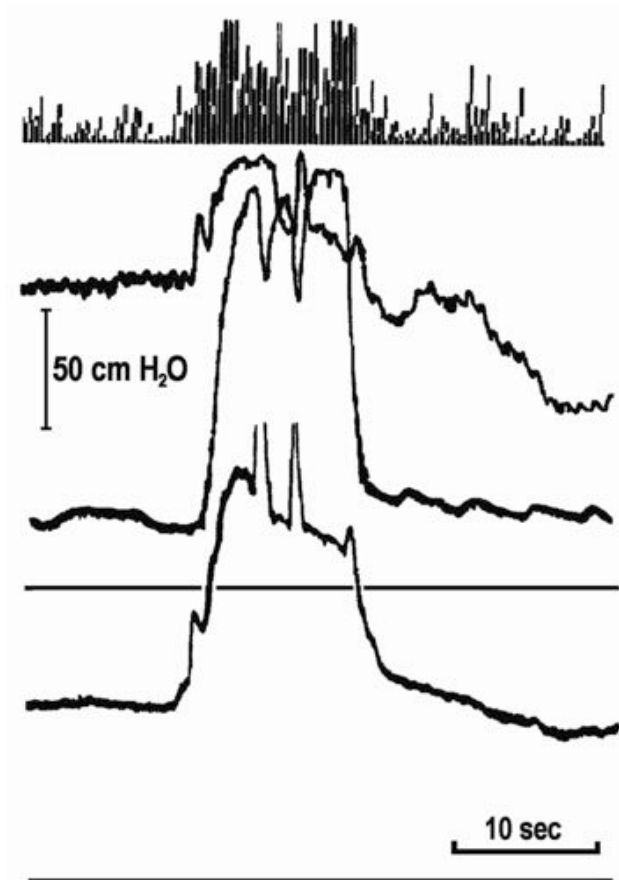
21-channel
high resolution
sidehole

Déglutition normale

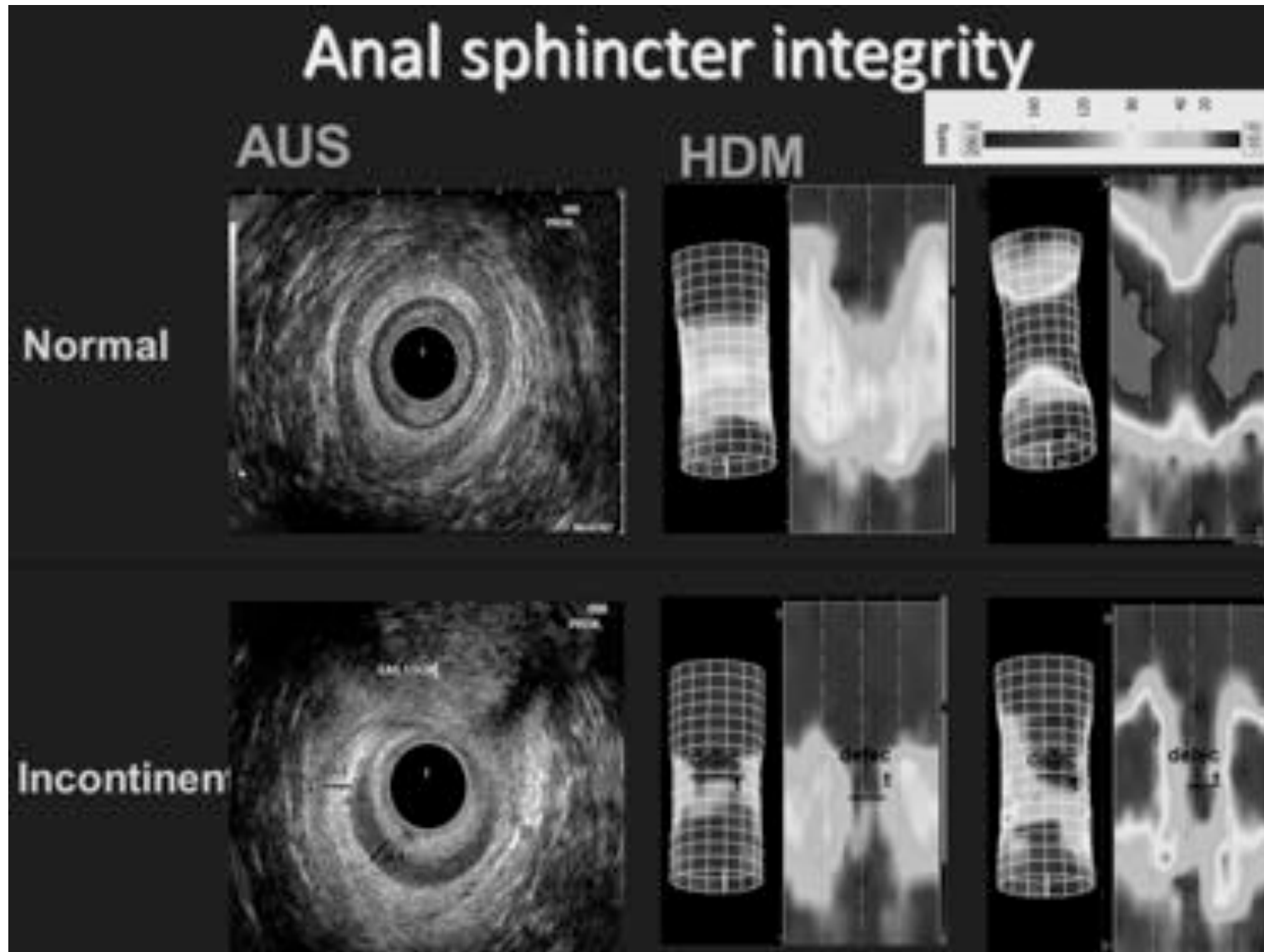
Amplitude
(mmHg)



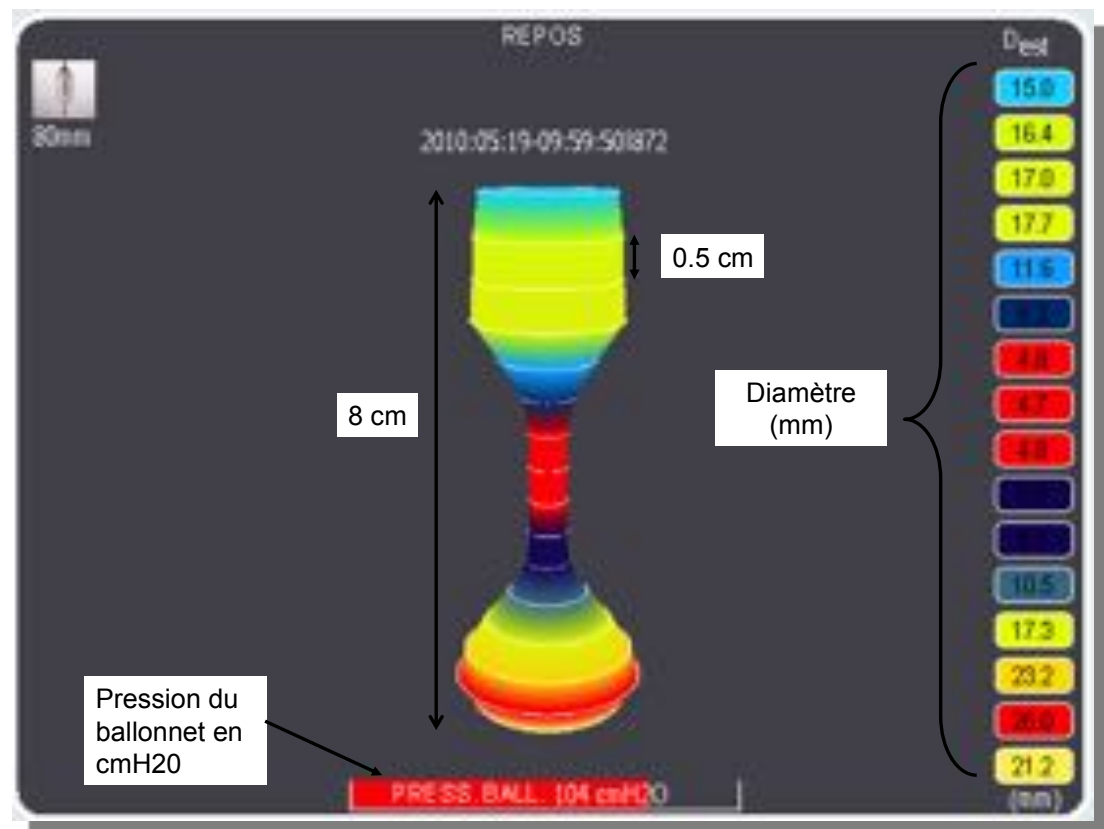
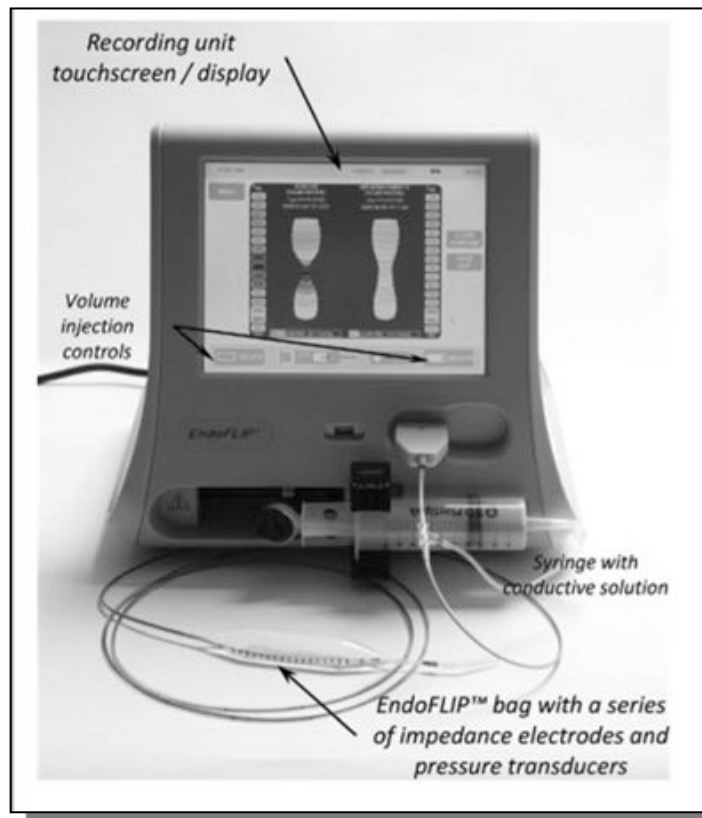
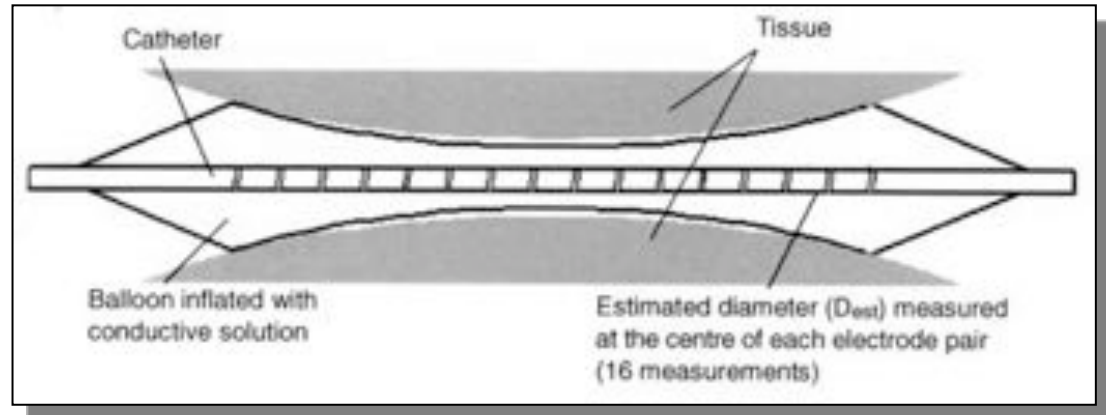
Dyssynergie ano-rectale: apport de la manométrie haute résolution



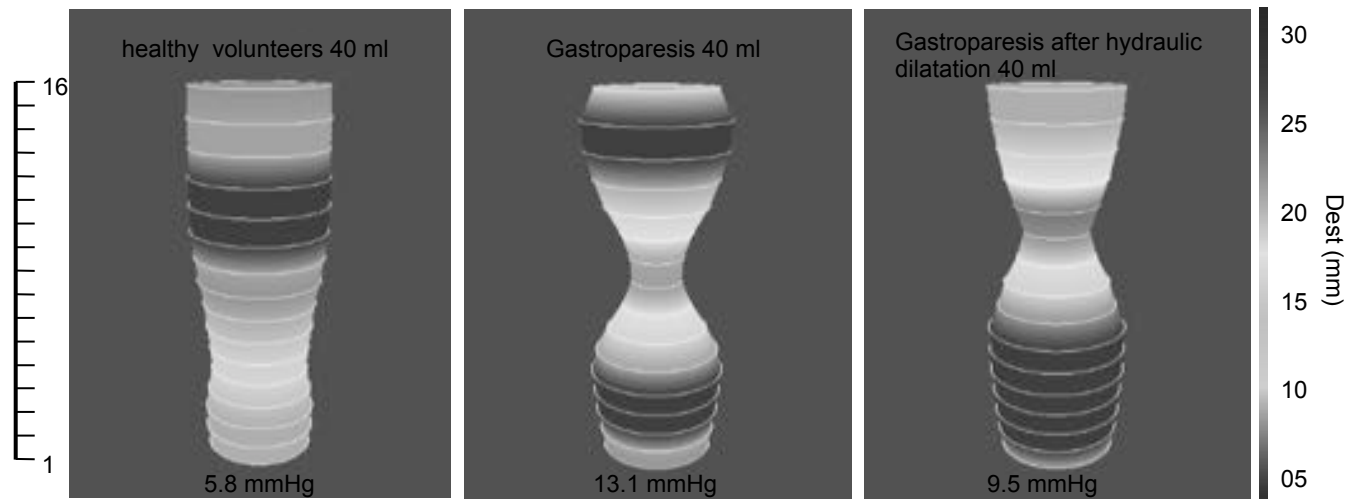
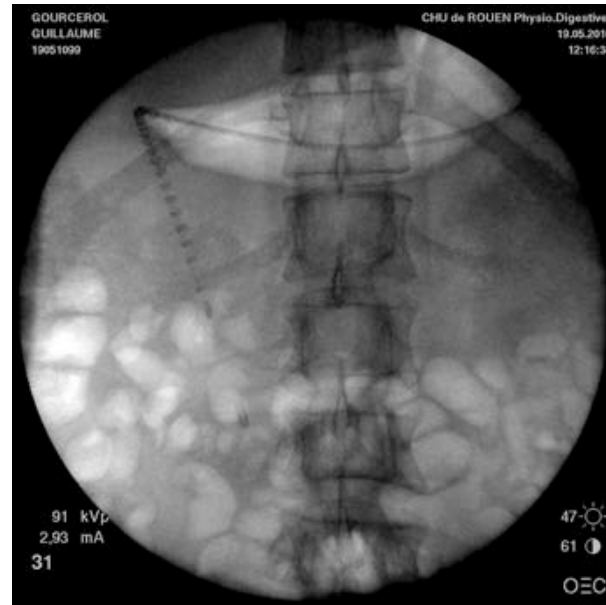
Incontinence anale: apport de la manométrie haute résolution 3D



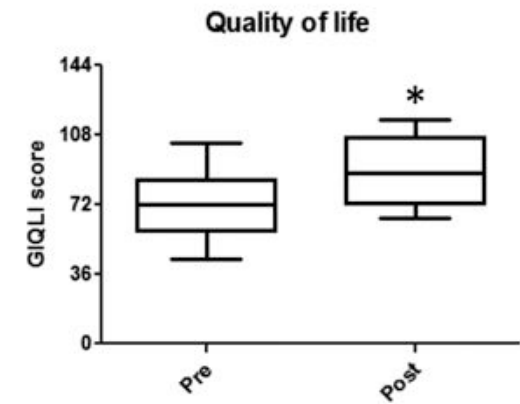
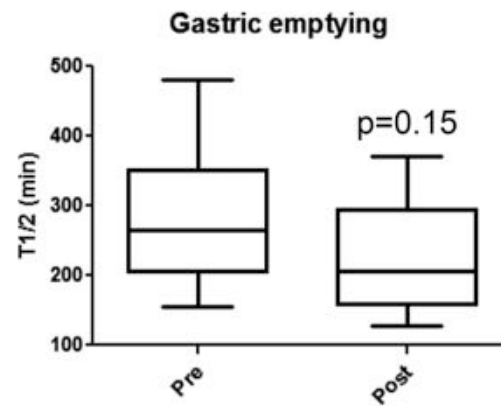
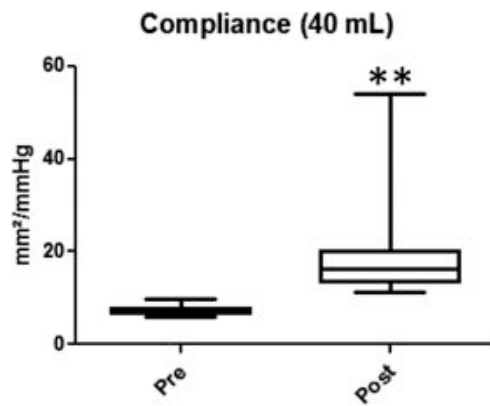
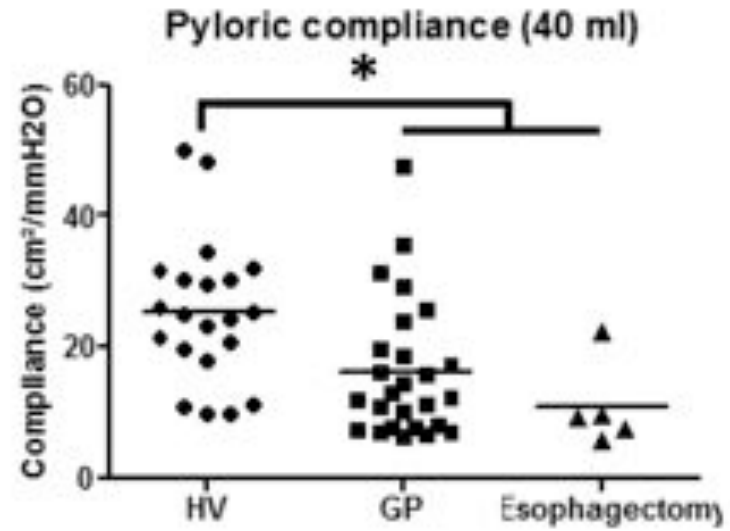
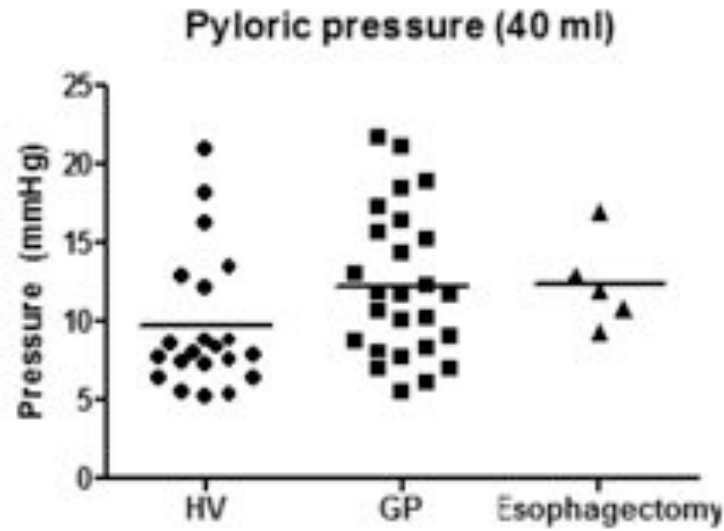
Compliance sphinctérienne Endoflip®



Compliance pylorique



Compliance pylorique



Système Endoflip pour estimation de complaisance anale: les principes



Anus cloaciciel



Sujet sain

Incontinence anale

