



Quelles sont les bonnes indications de la chirurgie antireflux ?

Tt médical versus cure RGO par laparoscopie

- 1 essai 217 malades 108 IPP / 109 chirurgie Nissen
Tt laparoscopique > Tt médical
 - ↘ exposition acide oeso. à 3 mois p<0.001 (PH-métrie)
 - scores confort digestif / bien être génér. à 12 mois p=0.003
Mahon Br J Surg 2005
- 2 essais Tt médical / laparotomie
 - Cie > Tt mal contrôle des symptômes (recul maxi 5 ans)
 - Place pour le Tt mal avec ajustement des doses
Spechler N Engl J med 1992
Lundell J Am Col Surg 2001

La pHmétrie et la manométrie sont-elles indispensables avant la chirurgie ? Faut-il faire d'autres examens

- pHmétrie utile en l'absence de certitude diagnostique
 - Symptomatologie atypique ORL, pulmonaire
 - Peu d'oesophagite
 - Mauvaise régression sous IPP

- Manométrie
 - permet de rectifier un diagnostic erroné
 - Document de référence sur la motricité du corps de l'oesophage

Etudes "comparatives" Patti : répartition selon manométrie

- 68 opérés, 2 perforations gastriques (1 conversion)
- Suivi ? évaluation postopératoire immédiate ?

| | Nissen | Rossetti | Guarner |
|---------------------|--------|----------|---------|
| Nbre de malades | 35 | 22 | 11 |
| Asymptomatiques | 91% | 68% | 82% |
| Dysphagie (n) | 1 | 3 | 1 |
| Dilatations postop. | - | 1 | - |
| Réopération | 1 | - | - |

Quels sont les éléments pré-opératoires qui déterminent le choix de la technique chirurgicale ?

- Aucun...
- Sclérodermie

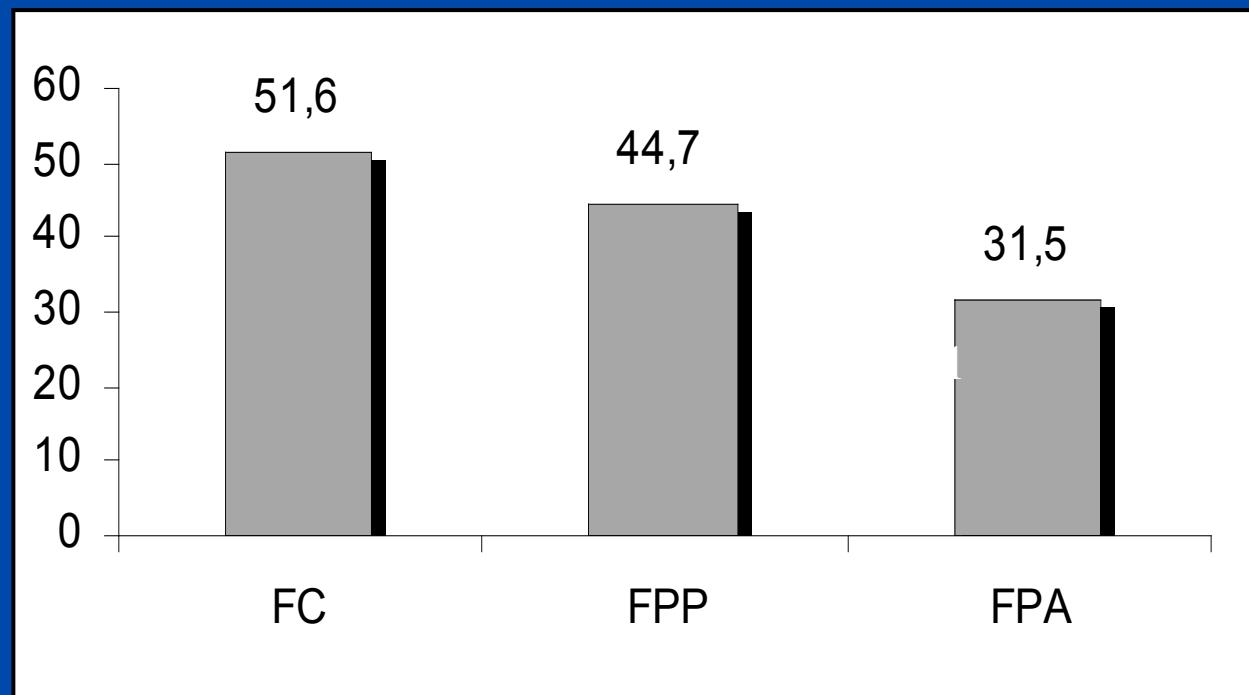
Comparaison entre valves complètes et partielles

Résultats > 5 ans

| | FC N=711 | FPP N=559 | FPA N=70 | p |
|--------------------|-------------|--------------|-------------|-------------------|
| Dysphagie | 54 (7,6%) | 11 (2%) | 3 (4,3%) | <0,0001 |
| Gas bloat Syndrome | 70 (9,8%) | 29 (5,2%) | 2 (2,8%) | 0,002 |
| Autres effets | 62 (8,7%) | 27 (4,8%) | 2 (2,8%) | 0,009 |
| Visick 1 + 2 | 661 (93%) | 519 (92,8%) | 66 (94,3%) | 0,9 |

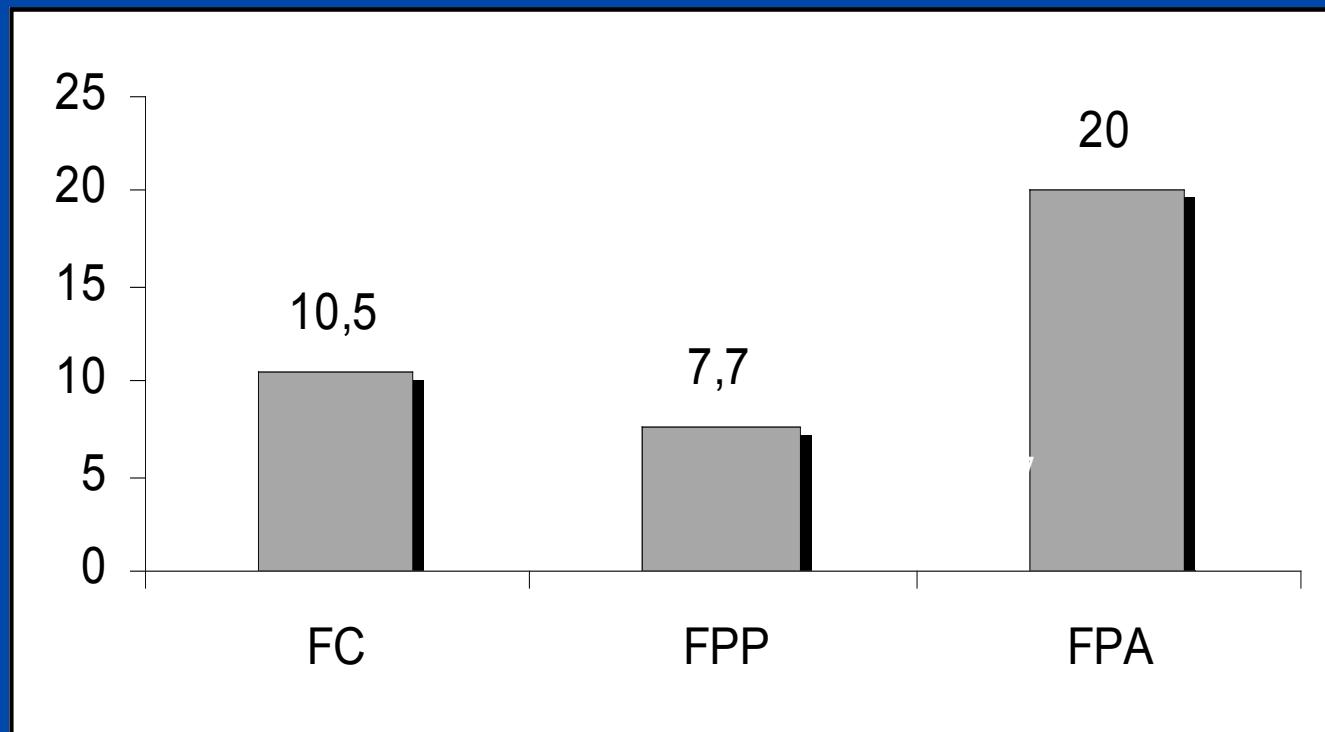
Comparaison entre valves complètes et partielles

Dysphagie à 3 mois



Comparaison entre valves complètes et partielles

Taux de récidive > 5 ans



Nissen versus Toupet.

HL Laws. 1997

| Nombre de malades | Nissen 23 | Toupet 16 |
|----------------------------------|------------------|-----------------|
| Section vx courts | 23 | 16 |
| Fermeture hiatale | ? | ? |
| Durée (min) | 155 | 162 |
| Abcès sous phrénaire | | 1 |
| Fistule oesophagienne | | 1 |
| Dilatations post-opératoire | 2 | 1 |
| Suivi moyen | 27.2 mois | |
| Aucun ou peu de symptômes | 21 (91%) | 15 (93%) |
| Symptômes significatifs | 2 | 1 |

Nissen with and without division of S.G.V.

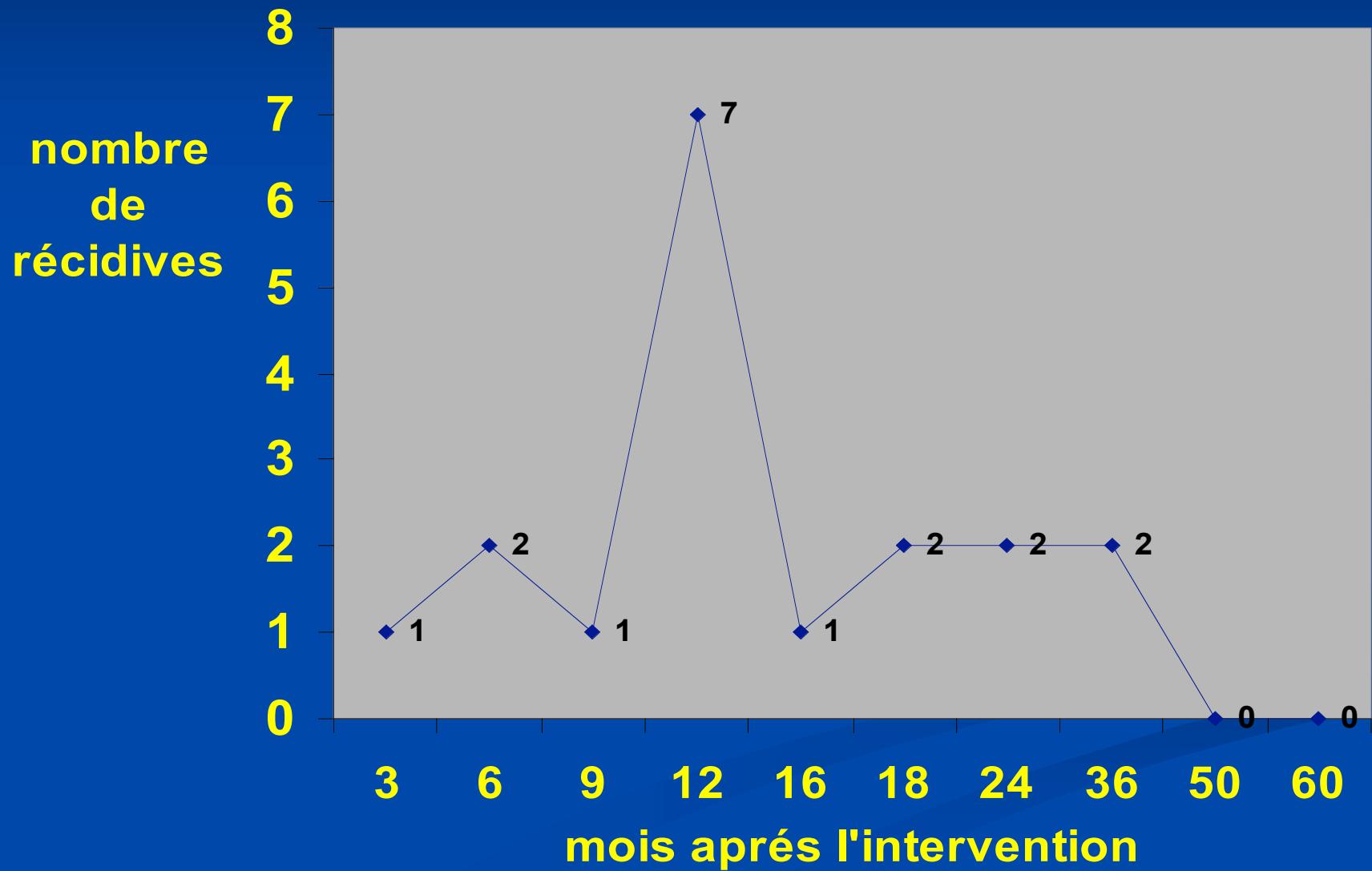
DI Watson. 1997

| Nbre de malades | Division 52 | No division 50 |
|-------------------------|---------------|----------------|
| Réalisés | 51 | 50 |
| Conversions | 4 | 0 |
| Fermeture hiatus | 51 | 50 |
| Durée (min) | 108 (59-215) | 70 (35-170) |
| Score difficultés | 6 (5.5-6.6) | 4.7 (4.1-5.4) |
| Gastric perforation | 1 | 0 |
| Intraoperative bleeding | 3 | 0 |
| Reoperation | 3 | 2 |
| Follow-up 6 months | 100 (98 %) | |
| Dysphagia score | 4.6 (2.3-6.9) | 4.8 (2.4-7.2) |

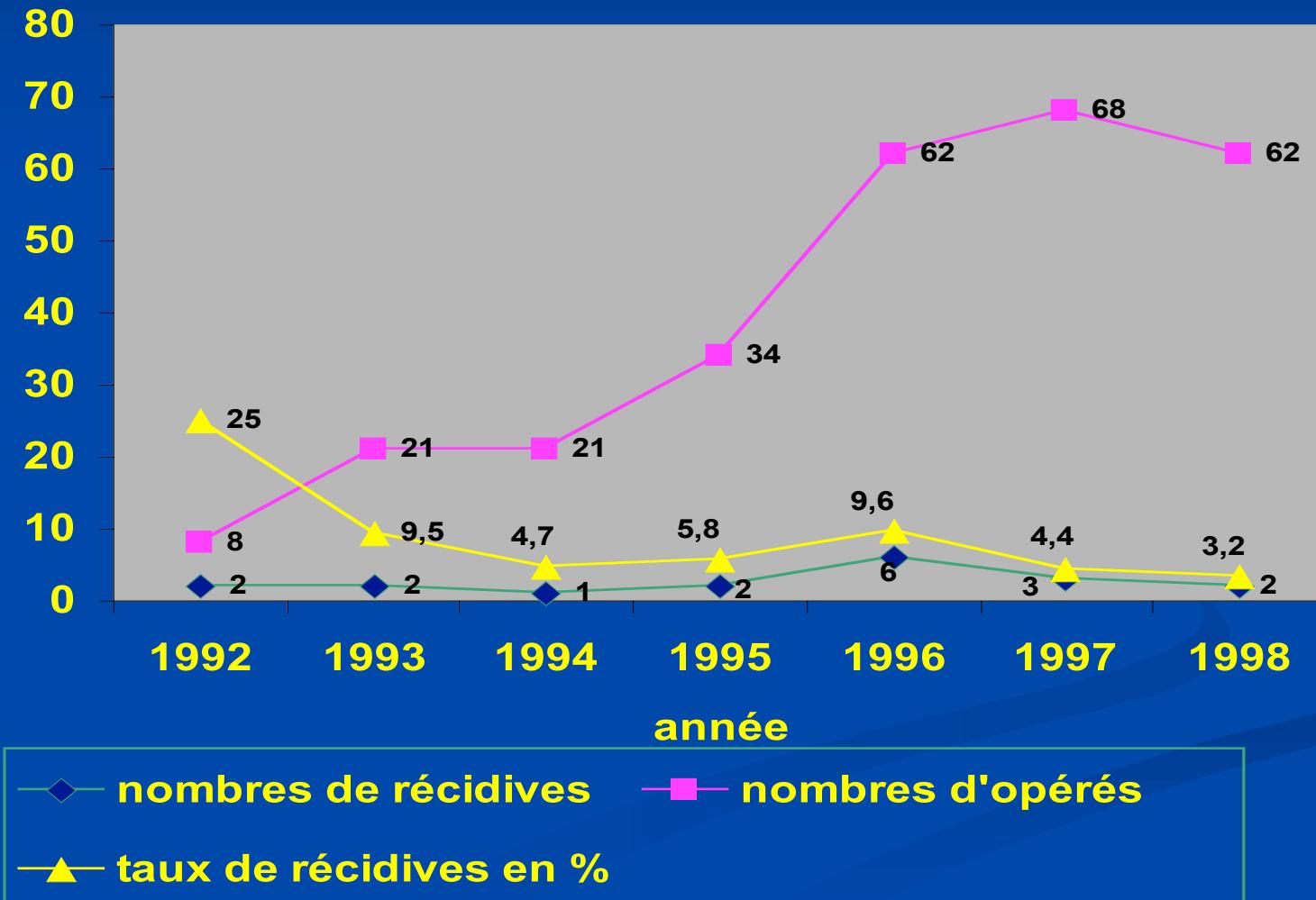
Quels sont les risques de la chirurgie antireflux?

Quels sont les résultats de la chirurgie antireflux à cours et à long terme. (Rôle de l'expertise du chirurgien)

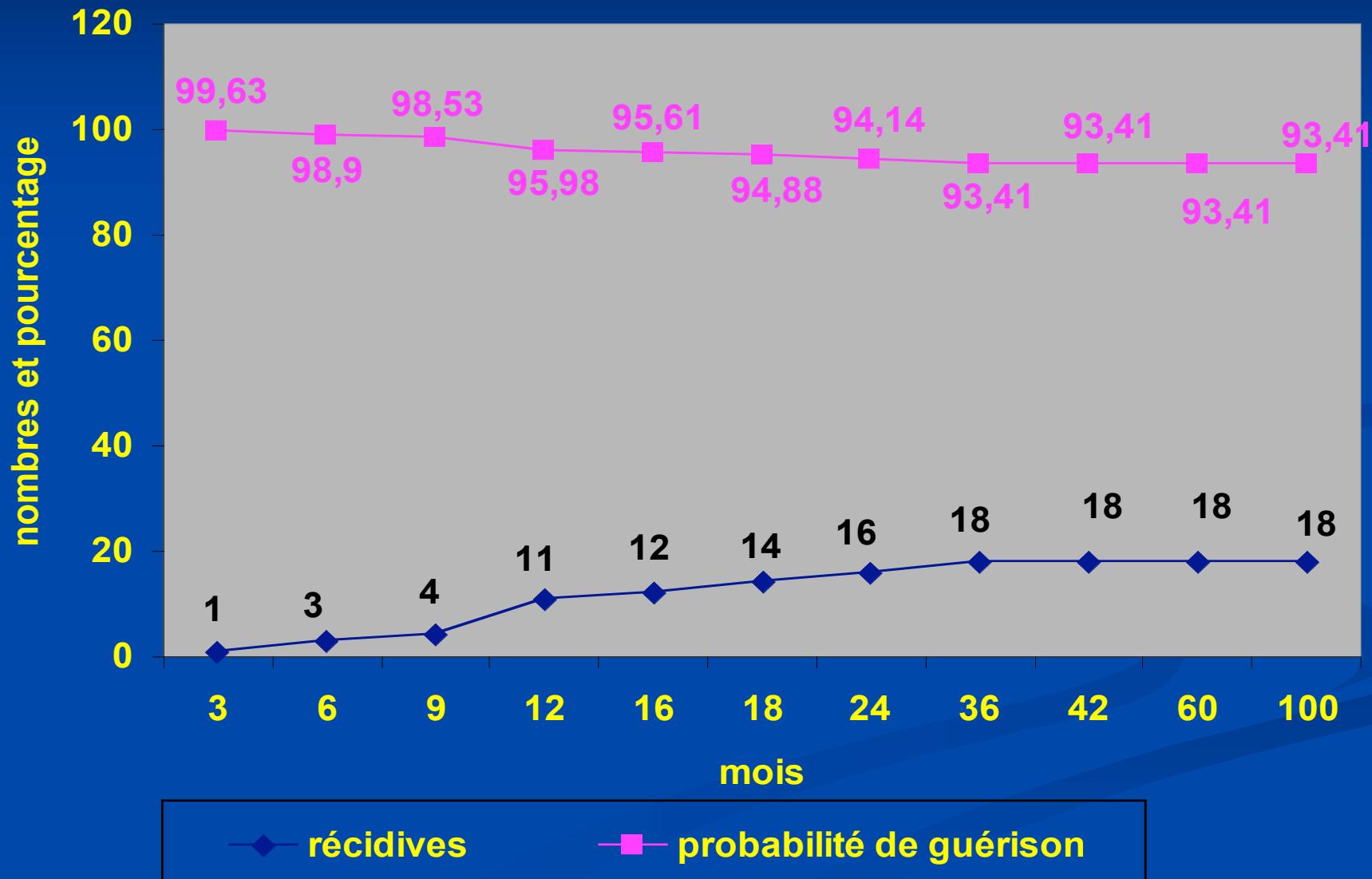
Délai de survenue des récidives



Risque de survenue de récidive en fonction de l'expérience



Taux de guérison



Que faire devant la récidive des symptômes digestifs après chirurgie antireflux ?

Quand faut-il réintervenir ?

- Smith, C. D., D. A. McClusky, et al. (2005). "When fundoplication fails: redo?" *Ann Surg* **241**(6): 861-9; discussion 869-71.
- **OBJECTIVE:** The largest series in the literature dealing with redo fundoplication was presented and published in 1999 and included 100 patients. Herein we update this initial series of 100, with 207 additional patients who have undergone redo fundoplication (n = 307).
SUMMARY BACKGROUND DATA: Increasing numbers of patients are failing esophagogastric fundoplication and requiring redo procedures. Data regarding the nature of these failures have been scant. **METHODS:** Data on all patients undergoing foregut surgery are collected prospectively. Between 1991 and 2004, 307 patients underwent redo fundoplication for the management of anatomic complications or recurrent GERD. Statistical analysis was performed with multiple chi² and Mann-Whitney U analyses, as well as ANOVA. **RESULTS:** Between 1991 and 2004, 1892 patients underwent primary fundoplication for GERD (1734) or paraesophageal hernia (158). Of these, 54 required redo fundoplication (2.8%). The majority of failures (73%) were managed within 2 years of the initial operation (P = 0.0001). The mechanism of failure was transdiaphragmatic wrap herniation in 33 of 54 (61%). In the 231 patients who underwent fundoplication elsewhere, 109 had transdiaphragmatic herniation (47%, P = NS). In this group of 285 patients, 22 (8%) required another redo (P = NS). The majority of the procedures were initiated laparoscopically (240/307, 78%), with 20 converted (8%). Overall mortality was 0.3%. **CONCLUSIONS:** Failure of fundoplication is unusual in experienced hands. Most are managed within 2 years of the initial operation. Wrap herniation has now become the most common mechanism of failure requiring redo. Redo fundoplication was successful in 93% of patients, and most could be safely handled laparoscopically

CAT devant une dysphagie post intervention

- Dysphagie précoce
- Quel est le type de montage?
- Quel est le mécanisme de la dysphagie?
-

CAT devant une dysphagie post intervention

- Dysphagie tardive

CAT devant une dysphagie post intervention

- Dysphagie précoce
- Sciaudone, G., T. Perniceni, et al. (2000). "[Immediate postoperative complications after a laparoscopic partial posterior fundoplication. Early laparoscopic reoperation]." *Ann Chir* **125**(9): 838-43.
- **AIM OF THE STUDY:** The immediate postoperative course of laparoscopic partial posterior fundoplication can be complicated by severe dysphagia or paraesophageal hernia. The aim of this study was to describe the technical causes of these complications. **PATIENTS AND METHOD:** Four patients, operated for gastroesophageal reflux disease by laparoscopic partial posterior fundoplication, developed severe dysphagia ($n = 2$) or paraesophageal hernia ($n = 2$) during the immediate postoperative period. A barium swallow examination visualized the complication in both cases of dysphagia and in 1 case of paraesophageal hernia. The correct diagnosis was established by CT scan in the other case of paraesophageal hernia. Reoperations were performed by laparoscopy, 3 days ($n = 2$) or 6 days ($n = 2$) postoperatively. **RESULTS:** Dysphagia was due to compression of the esophagus against the hiatus by the fundoplication. A new and looser fundoplication was easily performed. Dysphagia was no longer present postoperatively. The two patients were symptom-free after 6 and 12 months of follow-up, respectively. In the cases of paraesophageal hernia, the bottoms of the crura were torn. In the patient reoperated 3 days postoperatively, the procedure was easily performed, the postoperative course was uneventful and the patient was symptom-free after a follow-up of 20 months. In the patient reoperated 6 days postoperatively, the upper part of the stomach had moved into the left pleural cavity, the procedure was difficult due to inflammation and thickening of the gastric wall, and the postoperative course was uneventful, but reflux recurred 18 months later. **CONCLUSION:** When severe dysphagia or paraesophageal hernia occurs during the immediate postoperative course of laparoscopic partial posterior fundoplication, reoperation, possibly by laparoscopy, identifies and cures the technical defects. Based on our experience, we suggest that surgical cure of paraesophageal hernia is easier when performed during the immediate postoperative period.

Quels sont les autres effets secondaires de la chirurgie antireflux

- Triponez, F., Surgery 2005.
- 3 groupes chirurgie laparoscopique / témoins / porteurs d'une hernie hiatale
- Analyse reflux dysphagie et gas bloat questionnaire standardisé
- 115 malades opérés d'un reflux avec un suivi de 1 à 7 ans
- 105 porteurs d'une hernie hiatale de découverte fortuite
- 238 sujets contrôle
- Les malades opérés d'un reflux ont un score de reflux = aux témoins ($p=1.1$) et $>$ aux porteurs hernie hiatale ($p0.001$)
- BACKGROUND: : They also had significantly more dysphagia and gas bloat than patients with hiatal hernia and controls ($P < .005$ for all comparisons). Gas bloat and dysphagia were more severe in hiatal hernia patients than in controls ($P < 0.005$). After fundoplication, the 25% of the patients with the shortest follow-up (1.5 $+$ - 0.2 years) and the 25% patients with the longest follow-up (5.8 $+$ - 0.6 years) had similar reflux, dysphagia, and gas bloat scores ($P = .43$, .82, and .85, respectively). CONCLUSION: In patients with severe GERD, laparoscopic fundoplication decreases reflux symptoms to levels found in control subjects. These results appear to be stable over time. However, patients who underwent fundoplication experience more dysphagia and gas bloat than controls and patients with hiatal hernia-symptoms that should be seen as a side effect of the procedure and of GERD itself.

- Chrysos, E., J. Tsiaouassis, et al. (2003). "Laparoscopic surgery for gastroesophageal reflux disease patients with impaired esophageal peristalsis: total or partial fundoplication?" *J Am Coll Surg* **197**(1): 8-15.
- **BACKGROUND:** It has been proposed that partial fundoplication is associated with less incidence of postoperative dysphagia and consequently is more suitable for patients with gastroesophageal reflux disease (GERD) and impaired esophageal body motility. The aim of this study was to assess whether outcomes of Toupet fundoplication (TF) are better than those of Nissen-Rossetti fundoplication (NF) in patients with GERD and low-amplitude esophageal peristalsis. **STUDY DESIGN:** Thirty-three consecutive patients with proved GERD and amplitude of peristalsis at 5 cm proximal to lower esophageal sphincter (LES) less than 30 mmHg were randomly allocated to undergo either TF (19 patients: 11 men, 8 women; mean age: $61.7 +/ - 8.7$ SD years) or NF (14 patients: 7 men, 7 women; mean age: $59.2 +/ - 11.5$ years), both by the laparoscopic approach. Pre- and postoperative assessment included clinical questionnaires, esophageal radiology, esophageal transit time study, endoscopy, stationary manometry, and 24-hour ambulatory esophageal pH testing. **RESULTS:** Duration of operation was significantly prolonged in the TF arm (TF: $90 +/ - 12$ minutes versus NF: $67 +/ - 15$ minutes; $p < 0.001$). At 3 months postoperatively, the incidences of dysphagia (grades I, II, III) and gas-bloat syndrome were higher after NF than after TF (NF: 57% versus TF: 16%; $p < 0.01$ and NF: 50% versus TF: 21%; $p = 0.02$, respectively), but decreased to the same level in both groups at the 1-year followup (NF: 14% versus TF: 16% and NF: 21% versus TF: 16%, respectively). At 3 months postoperatively, patients with NF presented with significantly increased LES pressure than those with TF ($p = 0.02$), although LES pressure significantly increased after surgery in both groups, as compared with preoperative values. Amplitude of esophageal peristalsis at 5 cm proximal to LES increased postoperatively to the same extent in both groups (TF, preoperatively: $21 +/ - 6$ mmHg versus postoperatively: $39 +/ - 12$ mmHg; $p < 0.001$, and NF, preoperatively: $20 +/ - 8$ mmHg versus postoperatively: $38 +/ - 12$ mmHg; $p < 0.001$). Reflux was abolished in all patients of both groups. **CONCLUSIONS:** Both TF and NF efficiently control reflux in patients with GERD and low amplitude of esophageal peristalsis. Early in the postoperative period, TF is associated with fewer functional symptoms, although at 1 year after surgery those symptoms are reported at similar frequencies after either procedure.

- Byrne, J. P., B. M. Smithers, et al. (2005). "Symptomatic and functional outcome after laparoscopic reoperation for failed antireflux surgery." *Br J Surg* 92(8): 996-1001.
- **BACKGROUND:** The aim was to determine symptomatic and functional outcome after reoperative antireflux surgery for recurrent reflux, persistent dysphagia and severe gas bloat, using a primarily laparoscopic surgical approach. **METHODS:** This was a retrospective analysis of prospectively collected data from 118 patients, of whom 70 had reoperative surgery for recurrent reflux, 35 for dysphagia and 13 for gas bloat. DeMeester scores before and 1 year after surgery, functional symptoms after surgery and overall patient satisfaction were analysed. **RESULTS:** Reoperation was completed laparoscopically in 101 patients (85.6 per cent), in 28 after previous open hiatal surgery. The operation was converted from an initial laparoscopic approach to open surgery in 17 patients. One-year follow-up data were available for 104 patients (88.1 per cent). After reoperation for recurrent reflux, 84 per cent had a DeMeester heartburn score of zero or one, and 87 per cent had a regurgitation score of zero or one. After reoperation for dysphagia, 21 of 32 patients had a dysphagia score of zero or one, with improvement observed in 25. All patients undergoing reoperation for severe gas bloat were satisfied with the outcome 1 year after operation. **CONCLUSION:** Revisional surgery for recurrent reflux using a laparoscopic approach offered high rates of success and patient satisfaction. Swallowing returned to normal in two-thirds of patients after reoperation.