Gastroesophageal Reflux Disease as an Indication of Revisional Bariatric Surgery - Indication and Results - a Systematic Review and Metanalysis

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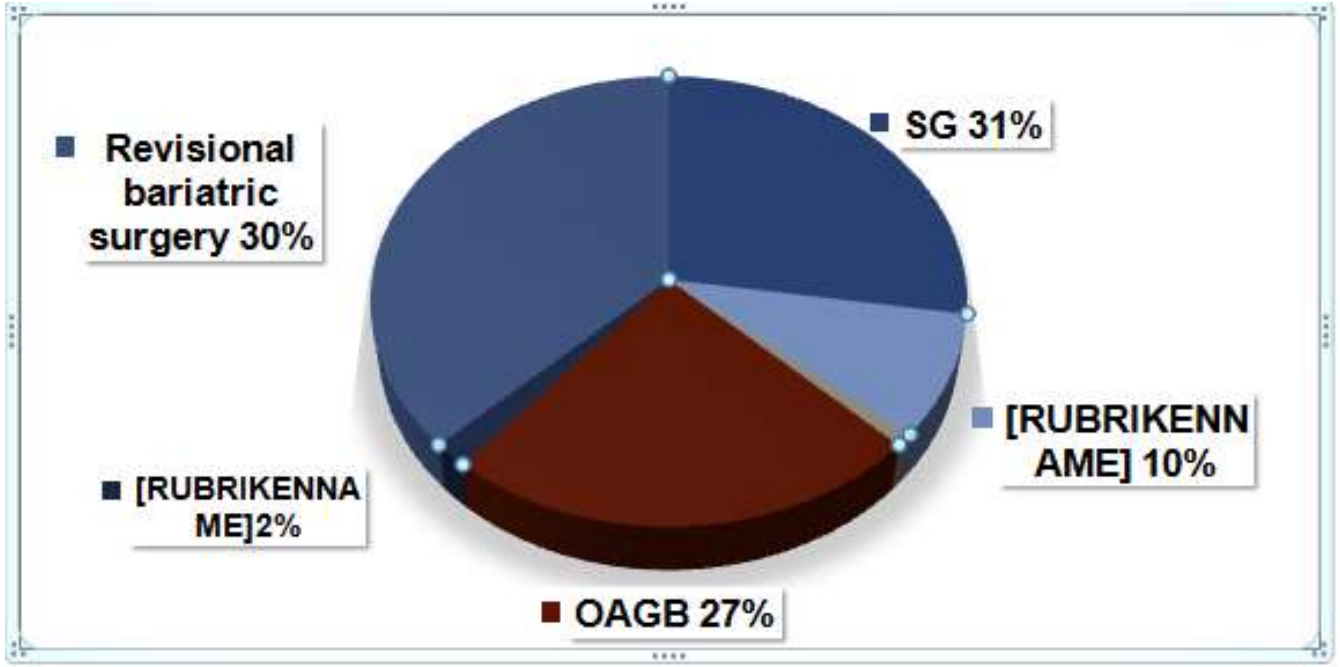
I have no potential conflict of interest to report

CASE MIX DISCLOSURE



Revisional Bariatric Surgery

ELSEVIER

SURGERY FOR OBESITY AND RELATED DISEASES

Surgery for Obesity and Related Diseases 16 (2020) 908–915

Original article

Trends in revisional bariatric surgery using the MBSAQIP database 2015-2017

Benjamin Clapp, M.D., F.A.C.S., F.A.S.M.B.S*, Brittany Harper, M.S., Christopher Dodoo, M.S, William Klingsporn, M.D, Ashtyn Barrientes, Michael Cutshall, M.D, Alan Tyroch, M.D., F.A.C.S

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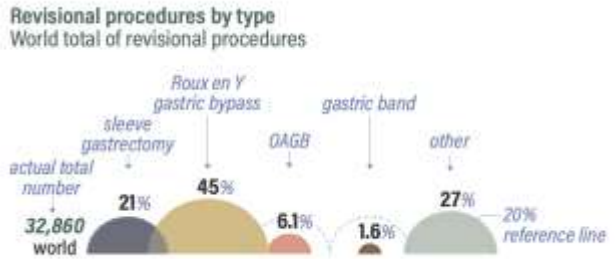
Fig. 3. Number and type of revision/conversion cases.

- weight regain/weight loss failure
- recurrence of metabolic disorders
- long-term complications

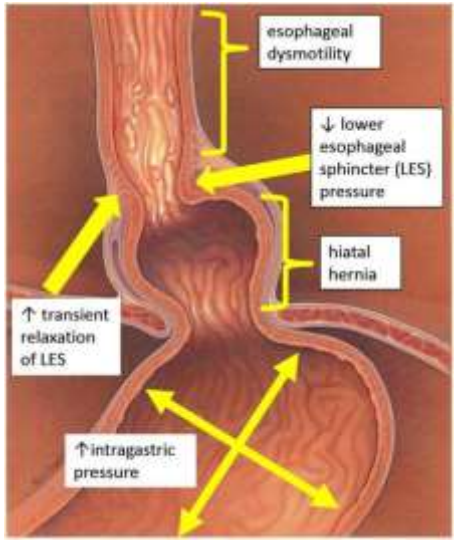
11% of all procedures!

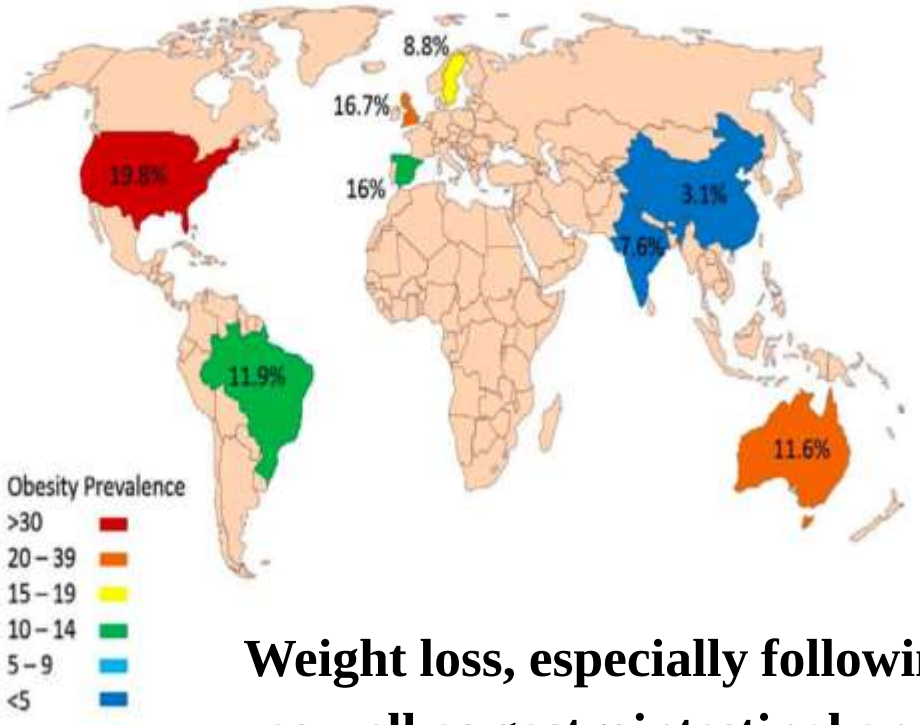


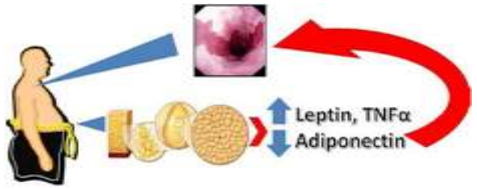
IFSO NAPOLI 2023

Obesity and GERD

Chang and Friedenberg

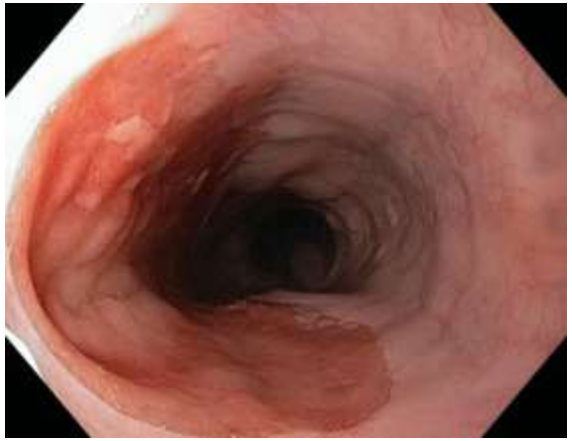






Weight loss, especially following BMS, improves GERD as well as gastrointestinal and general quality of life of patients.

Bariatric Surgery and GERD



However, depending on the type of bariatric procedure,

surgery can worsen or even cause a new-onset of **GERD!**

Barrett's esophagus after sleeve gastrectomy: a systematic review and meta-analysis CME

Bashar J. Qumseya, MD, MPH,[1] Yazan Qumsiyeh, MD,[2] Sandeep A. Ponniah, MD,[3] David Estores, MD,[1] Dennis Yang, MD,[1] Crystal N. Johnson-Mann, MD,[4] Jeffrey Friedman, MD,[4] Alexander Ayzengart, MD, MPH,[4] Peter V. Draganov, MD[1]

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SURGERY FOR OBESITY AND RELATED DISEASES ASMBS Submit

ORIGINAL ARTICLE | VOLUME 16, ISSUE 11, P1828-1836, NOVEMBER 01, 2020

Incidence of GERD, esophagitis, Barrett's esophagus, and esophageal adenocarcinoma after bariatric surgery

Lisa A. Bevilacqua, M.D. • Nabeel R. Obeid, M.D. • Jie Yang, Ph.D. • ... Maria S. Altieri, M.D., M.S. • Konstantinos Spaniolas, M.D. • Aurora D. Pryor, M.D., F.A.C.S. • Show all authors

JOURNAL ARTICLE

GORD and Barrett's oesophagus after bariatric procedures: multicentre prospective study

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British Journal of Surgery, Volume 108, Issue 12, December 2021, Pages 1498–1505, https://doi.org/10.1093/bjs/znab330

GERD and Revisional Bariatric Surgery

Obesity Surgery (2022) 32:3156–3171
https://doi.org/10.1007/s11695-022-06183-w

REVIEW

Gastroesophageal Reflux Disease as an Indication of Revisional Bariatric Surgery—Indication and Results—a Systematic Review and Metanalysis

Sonja Chiappetta[1] · Panagiotis Lainas[2,3] · Radwan Kassir[4,5] · Rohollah Valizadeh[6] · Alfonso Bosco[1] · Mohammad Kermansaravi[7]

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GERD and Revisional Bariatric Surgery

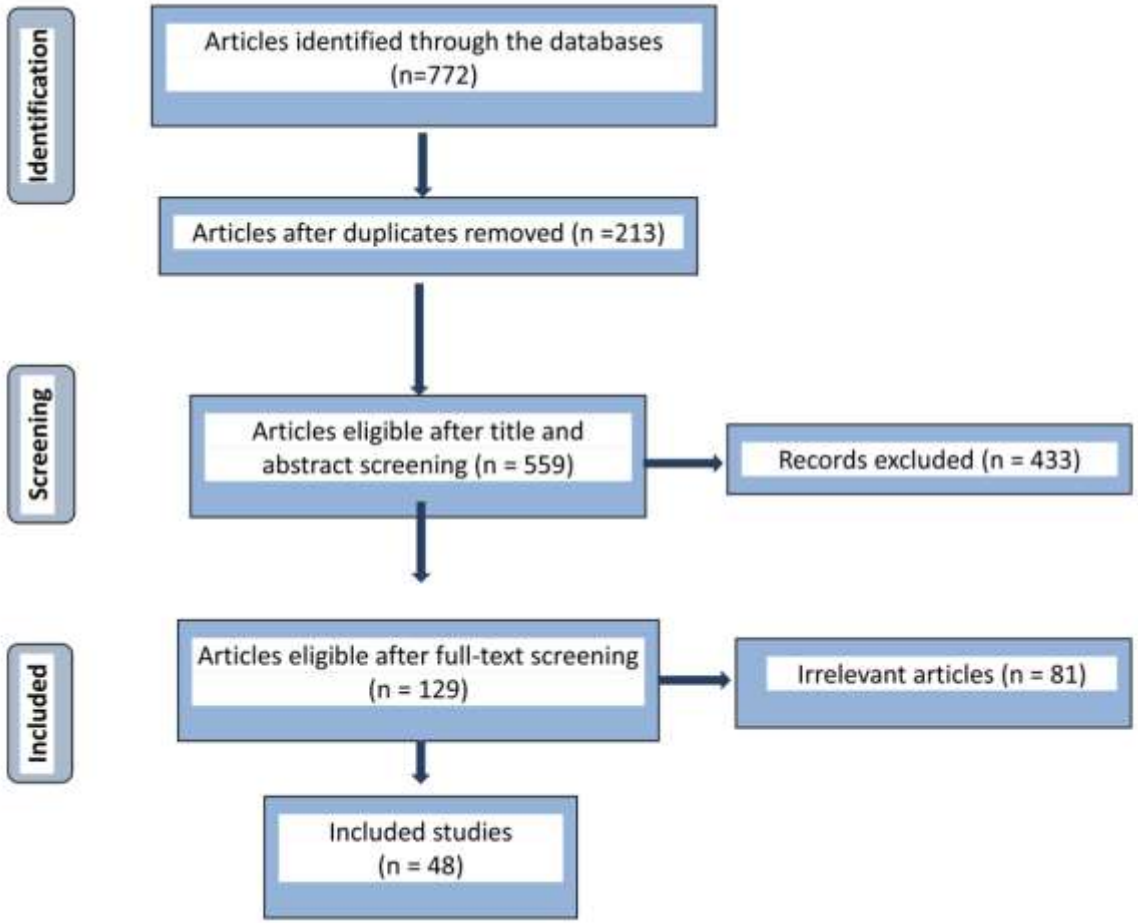
There is a lack of surgical standardization or a surgical procedure that is preferred to another to treat GERD after primary BMS!

The aim of this study is to provide a systematic review and meta-analysis on GERD after primary BMS

and discuss the various procedures available to address this issue

Methods

Fig. 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses



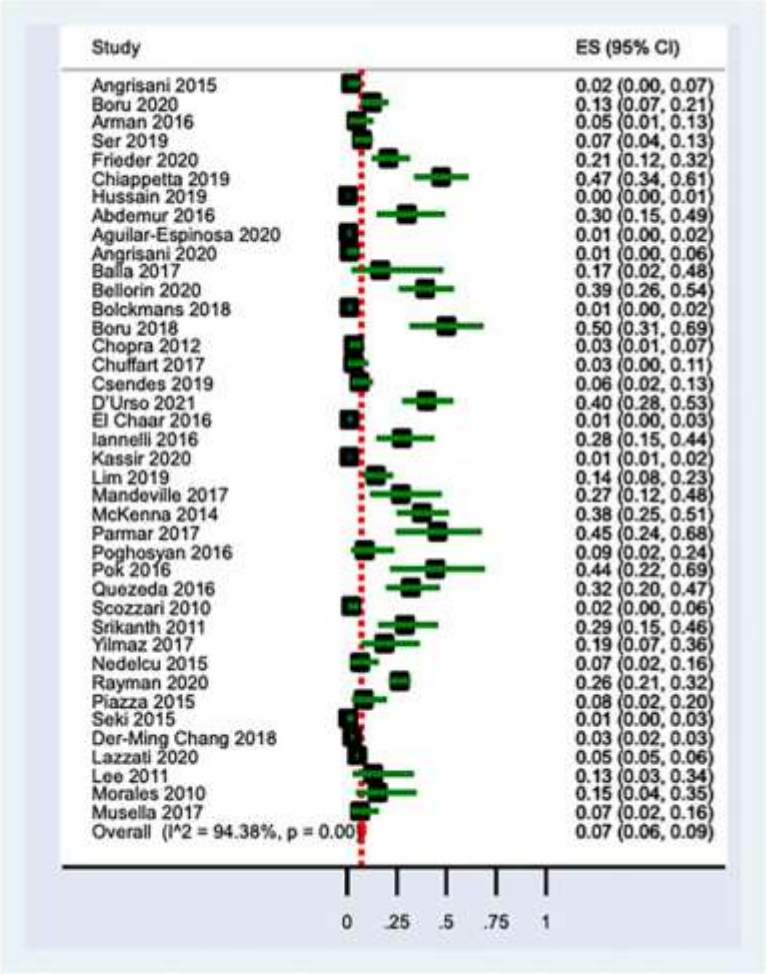
Results

Primary bariatric procedures included:

- **SG** (27 studies, *n = 764 patients, 83.5%)*
- **SG with hiatal hernia repair** (5 studies, *n = 32 patients, 3.5%)*
- **OAGB** (8 studies, *n = 62 patients, 6.8%)*
- **single anastomosis duodenaljejunal bypass with sleeve gastrectomy (SADJB-SG)** (1 study, *n = 11 patients, 1.2%)*
- **biliopancreatic diversion with duodenal switch (BPD/DS)** (1 study, *n = 1 patient*, 0.1%)
- **vertical banded gastroplasty (VBG)** (2 studies *n = 24 patients, 2.6%)*
- **gastric banding (GB)** (1 study, *n = 4, 0.4%)*
- one study included mixed data of RYGB and SG (*n = 4, 0.4%)*, and one study included mixed data of GB and VBG (*n = 11, 1.2%)*

Results

Fig. 2 Percent of GERD before secondary surgery as a forest plot



After primary BMS, pooled estimation of a meta-analysis of studies reported a **GERD of 7%**

Results

915 patients underwent revisional bariatric surgery (RBS) due to GERD

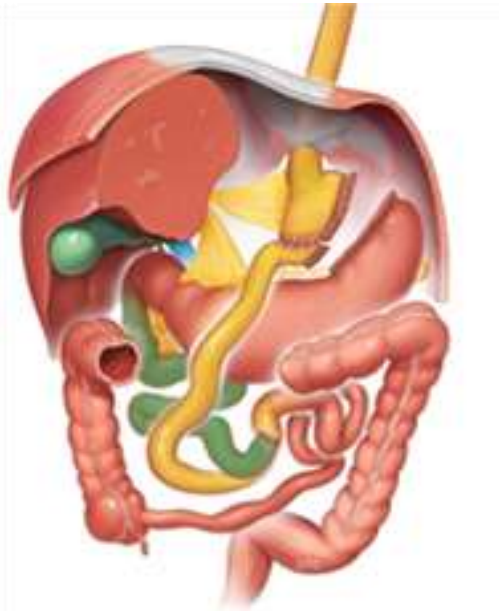
Table 3 Reasons to do reoperation following primary surgery

Variable	No. of patients reported in studies with listed reasons	Percent
intractable GERD including persistent GERD, de novo GERD	655	71.58
GERD + hiatal hernia	13	1.42
GERD + weight regain/weight loss failure	147	16.06
biliary reflux	57	6.22
GERD + band problems	3	0.32
GERD + stenosis	30	3.27
GERD + Barrett's esophagus	10	1.09

Results

Revisional bariatric surgery for GERD included seven different procedures:

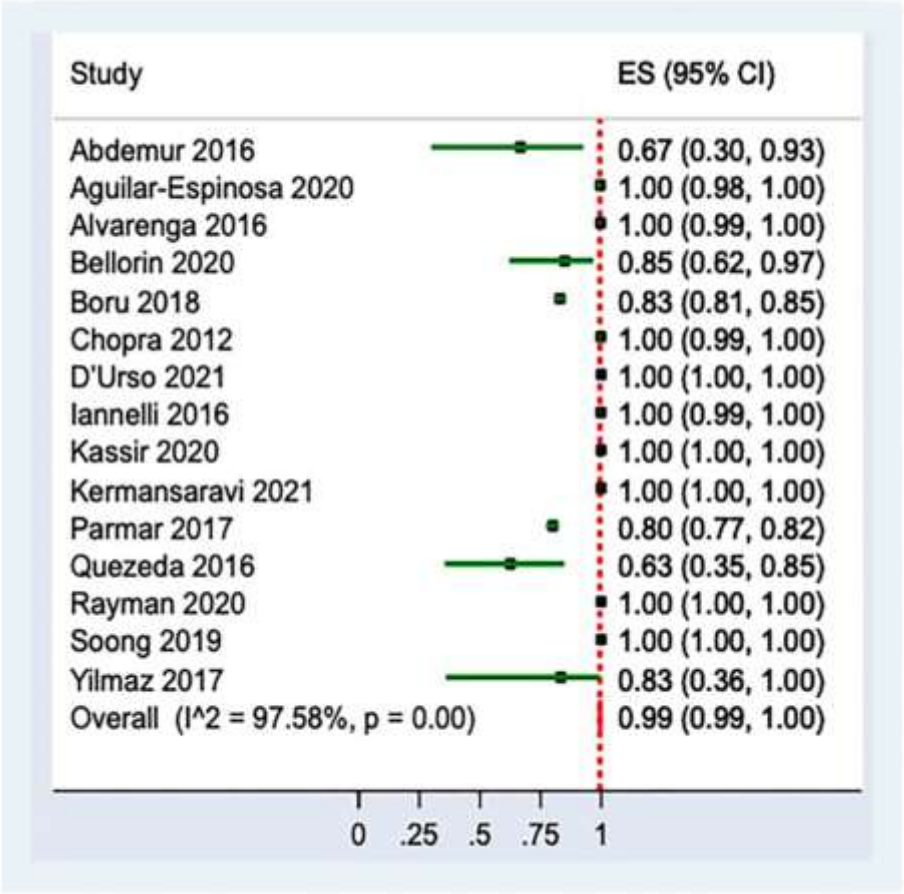
- Conversion in RYGB (32 studies, 310 patients)
- Conversion in RYGB with hiatal hernia repair (7 studies, 80 patients)
- Hiatal hernia repair with gastropexy (2 studies)
- Braun Anastomosis (2 studies)
- Re-SG (2 studies)
- OAGB (2 studies)
- Seromyotomy



Conversion in RYGB was the most performed RBS in this systematic rewiew (390 of 533 patients, 73%)

Results

Fig. 3 Percent of remission following secondary surgery as a forest plot



Polled estimation of a meta-analysis of the studies reported a **GERD remission of 99%** following secondary surgery.

Results

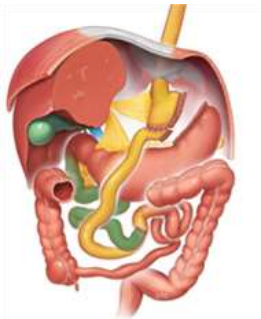
- After primary BMS, pooled estimation of a meta-analysis of studies reported a **GERD of 7%**.

- **SG was with 83.5% the most reported primary** BMS procedure, which needed RBS due to GERD, followed by OAGB with 6.8%.

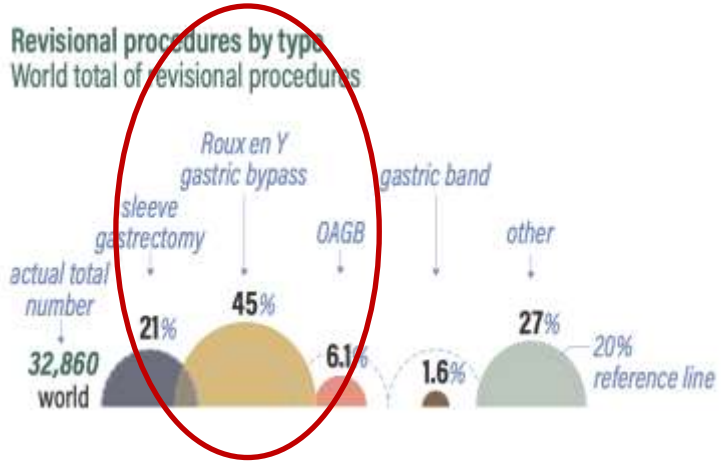
- Polled estimation of a meta-analysis of the studies reported a **GERD remission of 99%** following secondary surgery.

- Although current literature reports different surgical treatment options, convesion in **RYGB is the most performed RBS in treating GERD after primary BMS (73.2%)**.

Conclusion



This study underlines the importance of GERD in the long-term, especially after SG, but on the other hand demonstrates the evidence that RYGB is an efficient surgical treatment option for this long-term complication



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THANK YOU FOR YOUR ATTENTION

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