Decisional Regret After Cholecystectomy

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SURGICAL OUTCOMES RESEARCH CENTER SORCE

BACKGROUND

Cholecystectomy is safe with a low morbidity and mortality. While most patients do well, fourteen studies representing 4,500 patients have shown more than one third experience persistent symptoms and pain after cholecystectomy.[1] Whether these symptoms lead patients to regret cholecystectomy has not been established.

RESEARCH QUESTIONS

1. What is the burden of decisional regret in patients post-cholecystectomy?
2. What factors are associated with decisional regret post-cholecystectomy?

METHODS

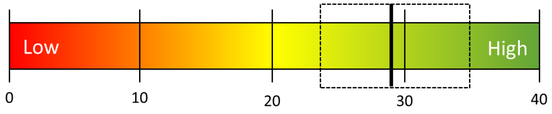
- Cross-sectional survey using Amazon's "MTurk"
- **Survey Components**
  - Screening for:
    - Gallbladder disease and cholecystectomy
  - Detailed gallbladder disease history
  - Experience with recovery
  - GI Quality of Life Index-10 (GIQLI-10)[2,3]
  - Decisional Regret Instrument[4]
  - Demographics

Decisional Regret Instrument

- Five question tool assessing patient satisfaction with medical decisions[4]
- Previously validated in surgical populations[5,6]
- Not previously applied post-cholecystectomy

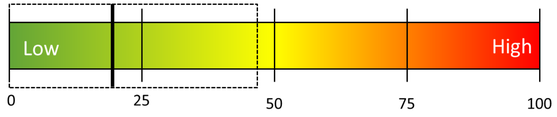
RESULTS

GI Quality of Life Index-10 Score – Median 29 (IQR 23-35)



15% GIQLI scores < 20

Decisional Regret Scale Score – Median 20 (IQR 0-45)



18% DRS scores > 50

Decisional Regret and GI Quality of Life

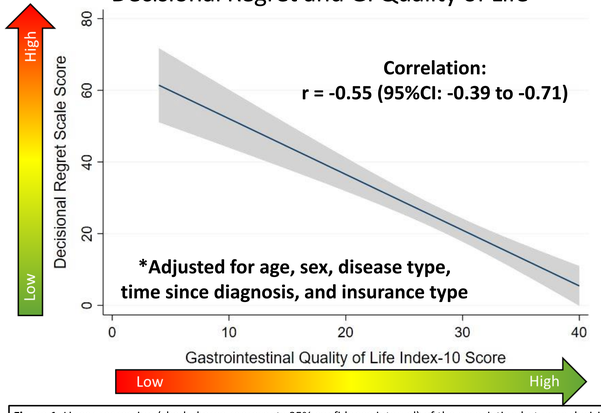


Figure 1. Linear regression (shaded area represents 95% confidence interval) of the association between decisional regret (DRS) and GI quality of life (GIQLI-10) adjusted for age, sex, disease type, time since diagnosis, and insurance type. The DRS is scored from 0 "low regret" to 100 "high regret." The GIQLI-10 is scored from 0 "low" to 40 "high." Data analysis conducted using Stata 16.1 (College Station, TX).

Participant Experience With Recovery and Decisional Regret

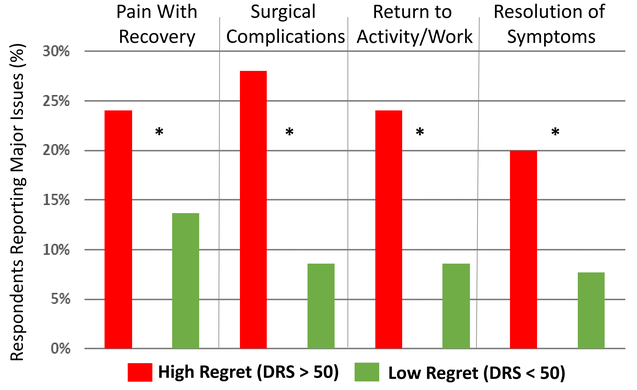


Figure 2. Respondents were asked to rate their experience with the above aspects of recovery on a 3-point Likert scale from 0 "no problems" to 2 "major problems." Respondents with decisional regret scores (DRS) greater than 50 more frequently reported major issues with pain, surgical complications, returning to work, and with resolution of pre-surgery symptoms. * indicates p<0.05 from Fisher's exact test.

CONCLUSIONS

GI quality of life is high and decisional regret is low for most after cholecystectomy. However, regret is present in nearly one in five after cholecystectomy. Regret is correlated with GI quality of life but also influenced by other aspects of the recovery from surgery. Surgeons should be aware of factors associated with regret after cholecystectomy in order to optimally counsel patients about expectations after surgery.

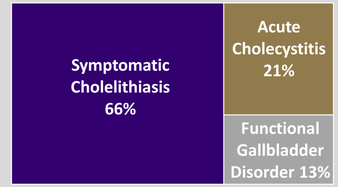
RESPONDENT CHARACTERISTICS

- 1,011 users screened with 236 survey-eligible
- 142 respondents
  - 66% female
  - Median age 39.5 years (IQR 29-49)
  - 80% White, 7% Black, 14% Hispanic/Latinx

Time since diagnosis

- > 1 year – 73%
- > 6 months – 18%
- < 6 months – 9%

Reason For Cholecystectomy



LIMITATIONS

- Generalizability - MTurk population is younger, more educated, and more frequently male than the general population.
- Disease severity - Without clinical information, we were unable to adjust for severity of disease.

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REFERENCES

1. Lois A, Hantouli MN, Davidson GH, Flum DR (2020) Medical Management of Symptomatic Gallstones. A Narrative Review. J Surg Oper Care 5(1): 105
2. Eypasch E, Williams JI, Wood-Dauphinee S, Ure BM, Schmülling C, Neugebauer E, Troidl H (1995) Gastrointestinal Quality of Life Index: development, validation and application of a new instrument. Br J Surg 82(2):216-22.
3. Eypasch E (2020) Gastrointestinal Quality of Life index - 10 items (GIQLI-10). Updated December 2020. Accessed February 1, 2021. https://eprovide.mapi-trust.org/instruments/gastrointestinal-quality-of-life-index-10-items#contact_and_conditions_of_use
4. Brehaut JC, O'Connor AM, Wood TJ, Hack TF, Siminoff L, Gordon E, Feldman-Stewart D (2003) Validation of a decision regret scale. Med Dec Mak 23(4): 281-92
5. Goel V, Sawka C, Thiel E, Gort E, O'Connor AM (2001) Randomized trial of a patient decision aid for choice of surgical treatment for breast cancer. Med Dec Mak 21:1-6
6. Wilson A, Ronnekleiv-Kelly SM, Pawlik TM (2017) Regret in Surgical Decision Making: A Systematic Review of Patient and Physician Perspectives. World J Surg 41(6):1454-1465