Cholecystectomy related complaints: a 20-year review of the Canadian medico-legal experience

Katlin Mallette[1], Alexa Ehlebracht[1], Richard Mimeault[2], Tricia Savoy[3], Gary Garber[3], Qian Yan[3], Anna MacIntyre[3], Richard Liu[3], Mehrnaz Mostafapour[3], Fady Balaa[1,2]

[1]Department of Surgery, University of Ottawa/The Ottawa Hospital, Ottawa, Canada, [2]Safe Medical Care Learning, Canadian Medical Protective Association, Ottawa, Canada, [3]Safe Medical Care Research, Canadian Medical Protective Association, Ottawa, Canada

Introduction & Aim

Cholelithiasis is a common problem amongst adults, with 1-2% becoming symptomatic. Laparoscopic cholecystectomy remains the standard of care for symptomatic patients and is one of the most commonly performed procedures by general surgeons in Canada. Significant post cholecystectomy complications are rare, but can have devastating consequences on patient, surgeon, and healthcare system.

This study aims to provide a 20-year review and examination of trends in Canadian medico-legal data related to post-cholecystectomy complaints.

Methods

This is a 20-year retrospective review of the Canadian Medical Protective Association's (CMPA) repository of medico-legal cases involving cholecystectomy related complaints between 2003-2022. Cases included all those in which the physician contacted the CMPA for assistance, and included civil legal actions, medical regulatory (College) complaints, and hospital level complaints. Data analysis was limited to descriptive statistics using SAS software.

Results

- 488 cases were closed during the study time period, with initial events occurring from 1991-2021
- Trend of decreasing complaints during the study period (p-value=0.0004)
- Majority of patients identifying as female (66%)
- Majority being generally healthy (ASA I/II-73.6%)
- 555 physicians involved→ 484 operating surgeons named in complaints
  - 70% with ≥ 11 years in practice

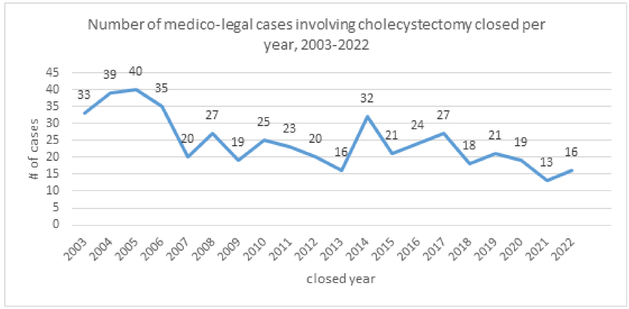


Figure 1. Number of CMPA cases involving cholecystectomy closed per year, from 2003-2022.

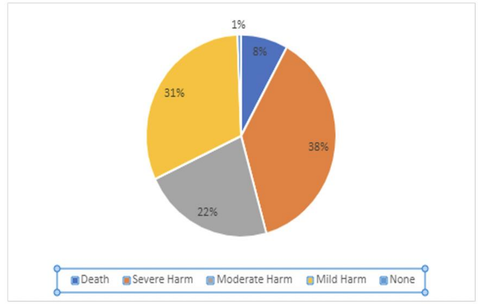


Figure 2. Harm classification on all cases involving bile duct injury between 2003-2022 (n=175)

Top 5 Complications	No. patients (%) n=488
Bile duct injury	175 (35.9)
Leak	74 (15.2)
Bowel injury	62 (12.7)
Sepsis	53 (10.9)
Hemorrhage	50 (10.2)

Table 1. Top complications experienced by patients who initiated a complaint amongst all cholecystectomy complaints

The mean time from incident to case closure was 63.2+/-42.3months. BDI cases were significantly more likely to result in a favourable medico-legal outcome for the patient (77%) compared to all cholecystectomy cases (54%).

Conclusions

This study demonstrates that in the Canadian medico-legal landscape, the majority of post cholecystectomy complaints involved generally healthy female patients. Unsurprisingly, BDI was the most common complication resulting in a complaint and these cases were more likely to result in a successful claim for the patient. Surgeons later in practice were more likely to be named in a complaint in comparison to their early in practice colleagues.