

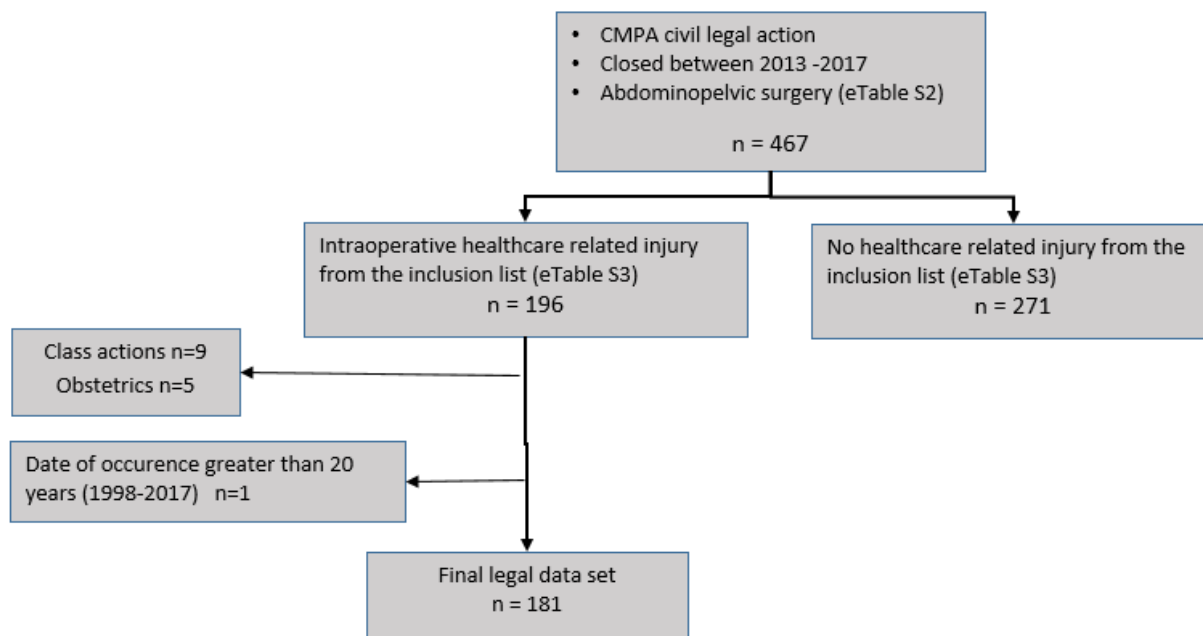
Appendix 1 to Lefebvre G, Devenny KA, Héroux DL, et al. Intraoperative injuries from abdominopelvic surgery: an analysis of national medicolegal data. *Can J Surg* 2021.

DOI: 10.1503/cjs.010219

Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca. Online appendices are unedited and posted as supplied by the authors.

Appendix 1. Supplemental material

Supplemental Figure S1: Selection criteria flow chart



Supplemental Table S1: Glossary of medico-legal terms

Term	Definition
Civil legal action	<p>In civil legal actions, the plaintiff seeks from the court an order of monetary compensation (damages) for harm or injury suffered as a result of the negligence or wrongful conduct of the defendant. Several different defendants, such as individual health professionals, hospitals/institutions, equipment manufacturers, and pharmaceutical companies may be named in a civil legal action. In civil legal actions, these issues are decided on the balance of probability (defendant in a civil action may be found liable if the essential elements of the claim are established on a balance of probability).</p> <p>The “cause of action” or central focus is usually an allegation of negligence, including substandard care and a lack of informed consent. Other allegations in civil legal actions include assault and battery, breach of contract, and breach of fiduciary duty. In civil legal actions, the plaintiff can be awarded monetary compensation as a result of either a successful legal action against the defendant physician(s) or as a negotiated settlement of the claim.</p>
Harm*	<p><i>Mild harm:</i> Patient harm is symptomatic, symptoms are mild, loss of function or harm is minimal (permanent or temporary), and minimal or no intervention is required (e.g. extra observation, investigation, review, or minor treatment).</p> <p><i>Moderate harm:</i> Patient harm is symptomatic, requiring intervention (e.g. additional operative procedure, additional therapeutic treatment), and increased length of stay, or causing permanent or temporary harm, or loss of function.</p> <p><i>Severe harm:</i> Patient harm is symptomatic, requiring life-saving intervention or major medical/surgical intervention, shortening life expectancy, or causing major permanent or temporary harm or loss of function. Includes previous catastrophic disability.</p>
Inherent risk	<p>Based on peer expert opinion, a harmful incident that is a known risk associated with a particular investigation, medication, or treatment. It is the risk from undergoing a procedure in ideal conditions, performed by qualified staff using current research, equipment and techniques.</p>
Patient safety incident**	<p>An event or circumstance which could have resulted, or did result, in unnecessary harm to the patient.</p> <p><i>Harmful incident:</i> A patient safety incident that resulted in harm to the patient.</p> <p><i>No harm incident:</i> A patient safety incident that reached the patient but no discernible harm resulted.</p> <p><i>Near miss:</i> A patient safety incident that did not reach the patient.</p>
Peer expert	<p>Physicians retained by parties in the legal actions who interpreted and provided their opinions on clinical, scientific, or technical issues surrounding the healthcare provided and the alleged injuries sustained; typically, of similar training and experience as the physicians whose care they were reviewing.</p>

Appendix 1 to Lefebvre G, Devenny KA, Héroux DL, et al. Intraoperative injuries from abdominopelvic surgery: an analysis of national medicolegal data. *Can J Surg* 2021.

DOI: 10.1503/cjs.010219

Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca. Online appendices are unedited and posted as supplied by the authors.

Term	Definition
Settlement	An agreement, usually monetary, made between opposing parties in a lawsuit to resolve the legal dispute. A lawsuit can be settled at any stage before the trial is concluded.

* The CMPA's in-house definitions relating to healthcare-related harm, adapted from the American Society for Healthcare Risk Management's *Healthcare Associated Preventable Harm Classification Tool*. (Hoppes M, Mitchell J. *Serious safety events: A focus on harm classification. Deviation in care as link*. Chicago, Illinois: American Society for Healthcare Risk Management; 2014).

** Defined by the World Health Organization (2009, January). *More than Words: Conceptual Framework for the International Classification for Patient Safety - Final Technical Report*. Available from http://www.who.int/patientsafety/taxonomy/icps_full_report.pdf [accessed 2019 Dec 11].

Appendix 1 to Lefebvre G, Devenny KA, Héroux DL, et al. Intraoperative injuries from abdominopelvic surgery: an analysis of national medicolegal data. *Can J Surg* 2021.

DOI: 10.1503/cjs.010219

Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca. Online appendices are unedited and posted as supplied by the authors.

Supplemental Table S2: CCI Inclusion codes

Inclusion codes based on the *Canadian Classification of Health Interventions (CCI)*[§] used to identify abdominopelvic surgical cases in the CMA data

Description	Section & Group (CCI field 1 & 2)	Approach/ technique (CCI field 4)
Therapeutic interventions	Nerves: 1BS Lymph: 1MG – MJ, 1MP Digestive: 1NE-NV Hepatobiliary: 1OA-OZ Urinary: 1PB-PZ Male: 1QT Female: 1RB - RM Hernia: 1SY80, 1SY84	Laparoscopy AA, AB, BQ, D*, E*, FD, FE, FG, FY, FZ, GB, GC, GD, GW, GX, GY, GZ, XO Laparotomy LA, LL, MB, ME, PB, PF, QV, RD, RE, RF, RG, RH, RJ, RK, RN, RP, RQ, RR, RS, SG, SH, SI, SJ, SK, SL, SM, TF, TG, TH, TJ, TK, TP, UW, VT, WJ, XP, Robotics PP, PQ, PR, PS
Diagnostic interventions	Nerves: 2BS Lymph: 2MG – MJ Digestive: 2NF-NT Hepatobiliary: 2OA-OZ Urinary: 2PB-PV Male: 2QT Female: 2RB-RM	Laparoscopic DA, DC Laparotomy LA, LL Robotics PP, PQ, PR, PS

[§] *Canadian Classification of Health Interventions. International Statistical Classification of Disease and Related Health Problems*. Ottawa, ON: Canadian Institute for Health Information; 2015.

Appendix 1 to Lefebvre G, Devenny KA, Héroux DL, et al. Intraoperative injuries from abdominopelvic surgery: an analysis of national medicolegal data. *Can J Surg* 2021.

DOI: 10.1503/cjs.010219

Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca. Online appendices are unedited and posted as supplied by the authors.

Supplemental Table S3: ICD-10 CA Inclusion codes

Inclusion codes based on the *International Statistical Classification of Disease and Related Health Problems (ICD-10-CA)*[†] used to identify intra-operative injuries in the CMPA abdominopelvic surgical cases.

Description	ICD-10 CA code
Injury codes	S34* nerves & spinal cord S35* blood vessels S36* abdominal organs S37* urinary and pelvic organs (S371* ureter)
CMPA in-house codes	0997.5100 – accidental ligation of ureter 0998.9100 – accidental ligation of blood vessel
Complications of medical and surgical care (T & Y codes)	T810 - hemorrhage T812 – laceration or puncture T815* - foreign body T817 – vascular Y600 – laceration with surgery Y610 – foreign body Y732, Y733, Y738 – gastrology and urology devices

[†] World Health Organization. Canadian enhancement to the International Statistical Classification of Diseases and Related Health Problems, 10th revision, Canada (ICD-10-CA). Vol 2. 5th ed. France: World Health Organization; 2012, 2015.

Appendix 1 to Lefebvre G, Devenny KA, Héroux DL, et al. Intraoperative injuries from abdominopelvic surgery: an analysis of national medicolegal data. *Can J Surg* 2021.

DOI: 10.1503/cjs.010219

Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca. Online appendices are unedited and posted as supplied by the authors.

Supplemental Table S4: CMPA contributing factor terminology

Contributing factor	Description
Clinical evaluation and decision-making	<p>Deficient histories and general evaluation.</p> <p>Issue involving a provider's decision-making related to selection and management of patient care.</p> <ul style="list-style-type: none"> • Delay or failure in the performance of a diagnostic test or therapeutic intervention (e.g. pharmacotherapy, surgery). • Contraindicated procedure or pharmacotherapy • Delay or failure to refer a patient or consult another physician • Delay, failure or inappropriate transfer of a patient
Deficient knowledge, skills or technique	<p>Issue involving a provider's clinical knowledge, skill, technique, training or education.</p> <ul style="list-style-type: none"> • Failure to protect a structure • Inadequate surgical field (Calot's triangle)
Procedural Violations	<p>Issue or violation involving:</p> <ul style="list-style-type: none"> • administrative policies and procedures of a physician's office, clinic, institution, or regional health authority that are designed to prevent or mitigate error • clinical practice guidelines specified by a regulatory authority (College or Government) or specialty • common clinical tasks as per a standard checklist, protocol, care map, clinical pathway, and decision tree; specified by institution, department or care team • wrong application or improper use of healthcare equipment
Misidentification of anatomy	<p>Intervention inadvertently performed on incorrect anatomical structure or organ. Includes mistaking one structure for another.</p>
Delayed recognition of injury	<p>Misdiagnosis, missed diagnosis or delay in diagnosis</p>
Informed consent	<p>Issue involving the discussion or documentation of the risks, limitations, side effects or alternative options of a diagnostic test or therapeutic intervention (e.g. pharmacotherapy, surgery).</p>
Documentation	<p>Inadequate, delay or failure to complete documentation (written or electronic). Including ambiguous, deficient or illegible medical records.</p>
Equipment or resource issue	<p>Faulty or malfunctioning healthcare equipment</p> <p>Insufficient or unavailable health care resources; including beds, staff, equipment.</p>

Appendix 1 to Lefebvre G, Devenny KA, Héroux DL, et al. Intraoperative injuries from abdominopelvic surgery: an analysis of national medicolegal data. *Can J Surg* 2021.

DOI: 10.1503/cjs.010219

Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca. Online appendices are unedited and posted as supplied by the authors.

System administrative protocols	Issue involving an institutions administrative policies and procedures designed to prevent or mitigate error.
---------------------------------	---