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Brief report

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Enhancing operative documentation in emergency hernia repair: Minimising medico-legal risk

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Abstract

Background: Chronic groin pain (CGP) following inguinal hernia repair is a recognised complication, often leading to litigation. While documentation practices in elective repairs are well studied, emergency repairs remain underexamined. Adequate operative documentation may mitigate against legal risks by ensuring comprehensive records of intraoperative findings.

Methods: A retrospective review of typed operative reports from all emergency inguinal hernia repairs performed at a single District General Hospital (DGH) between 2012 and 2013 was conducted. Data were extracted from the Operating Room Management Information System (ORMIS) using OPCS codes. Reports were analysed for documentation of key operative steps, including spermatic cord handling, prosthetic mesh use, and identification of inguinal canal nerves.

Results: A total of 43 emergency inguinal hernia repairs were identified. The mean patient age was 64 years (range: 24-93). Prosthetic mesh was used in 88% of cases. Spermatic cord handling was documented in 81% of reports, but identification of the ilio-inguinal nerve was recorded in only 7% of cases. No reports mentioned actively seeking but not identifying the nerve.

Conclusions: Incomplete documentation of key intraoperative findings in emergency inguinal hernia repair may increase the risk of litigation. Training programs should emphasise the importance of nerve identification and comprehensive operative reporting to improve patient safety and to ensure medico-legal protection. Artificial intelligence enabled digital consent and standardised templates could help prevent future medico-legal claims.

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Introduction

Chronic groin pain (CGP) is a well-documented complication following inguinal hernia repair in both the emergency & elective settings, with litigation increasingly citing inadequate documentation as one of the main factors in medico-legal claims. Whilst most studies focus on elective hernia repair, emergency cases present their own additional challenges due to time constraints and the complexity of acute presentations[1-3].

CGP can be debilitating and may significantly affect patients' quality of life. On review of the current available literature, litigation for CGP and testicular injury in open repairs accounted for up to 35% of claims with over 4 million pounds in settlements being paid out in the UK between 1995 and 2016[1]. Recent trends in litigation around this area demonstrate that poor communication and operative documentation leaves clinicians vulnerable to medico-legal proceedings, this is despite what may otherwise be a technically sound procedure[2,3]. Adequate operative documentation is therefore crucial in defending

against such claims[4].

This study aimed to examine the completeness of the operative records for emergency inguinal hernia repairs at District General Hospital, with a specific focus on key surgical steps, to identify areas for improvement and to mitigate against the risk of litigation.

Methods

Study Design: This was a retrospective review of typed operative reports from all emergency inguinal hernia repairs performed at a single district general hospital (DGH) between 2012 and 2013.

Data Collection: Data were extracted from the Operating Room Management Information System (ORMIS) using OPCS codes. Only cases of emergency inguinal hernia repair were included; all other hernia repairs were excluded. Further clinical data was extracted from the clinical notes by authors using a proforma.

Data Analysis: Reports were assessed for the following key variables: description of operative findings, method of repair, prosthetic mesh use, documentation of spermatic cord handling, and identification of ilio-inguinal nerve. No attempt is made to relate documentation quality to grade of surgeon, out-of-hours operating, or outcome.

Ethical Considerations: This study was registered and conducted in accordance with institutional guidelines for retrospective audits.

Results

The ORMIS database search suggested that 53 emergency inguinal hernias were repaired during these years (19 in 2012 and 34 in 2013). The typed reports revealed that 10 repairs were femoral hernias and were excluded.

All 43 emergency inguinal hernia repairs were in men whose mean age was 64 years (range: 24-93 years). On case note review the indication for operation appeared appropriate in all patients and their consent forms uniformly described CGP as a possible complication. Six consent forms (14%) explained the possibility of orchidectomy but none described testicular injury in isolation.

All operations were performed by surgeons in training using an open approach. Four cases involved senior surgeons two of which were as ‘telephone advice’. The majority were primary hernias (37/43; 86%) with well-described operative findings in all reports. The repair was augmented with prosthetic mesh (of various types) in the greater part of cases (88%).

Preservation of the spermatic cord was documented in 35 patients (81%) and four patients underwent orchidectomy. Identification of the ilio-inguinal nerve and its preservation (or division) was documented in only three patients (table 1). No operative report mentioned ‘seeking but not finding’ the nerve(s). The post-operative instructions were generally well stated.

Discussion

The main finding of this study was a demonstrable discordance between uniformly comprehensive consent, chronic groin pain was discussed with every patient, and intra-operative documentation, where the ilio-inguinal nerve was explicitly noted in only 7% of cases. This exposes a medico-legal vulnerability, because missing records of key anatomical steps weaken subsequent medico-legal defence even when technical performance is sound. A methodological strength is the capture of every emergency inguinal hernia repair performed at our district general hospital over a continuous two-year period, providing a complete, unselected dataset for analysis.

Emergency groin hernia repair carries a recognised complication burden, particularly when performed out of hours or in physiologically compromised patients[5] Consent practice in the present series compares favourably with earlier UK audits, where documentation of chronic pain ranged from 7 to 35%[2,3,4]. Even so, thorough counselling does not by itself prevent litigation. Analysis of fifty-five thousand Finnish repairs found that only 0.2% of patients pursued compensation, yet chronic pain was the commonest cause among those claims[7]. The financial implications, though numerically small, remain significant for healthcare providers.

This study has several limitations. The work is single-centre and relates to 2012–2013, reducing generalisability to contemporary practice. Case identification relied solely on OPCS coding, introducing potential misclassification. Data were abstracted by one reviewer from typed notes without an inter-rater reliability check. Correlation between documentation quality, surgeon grade, timing of surgery, and postoperative outcome was not explored. Retrospective design also prevents distinction between nerves genuinely not visualised and nerves omitted from the record. These factors position the study as baseline audit rather than definitive evaluation.

Inadequate operative notes complicate the defence of future claims because the factual basis for causation is weakened when key anatomical steps are missing. Comparable audits elsewhere report nerve documentation rates below twenty per cent, indicating that the problem is not confined to a single institution[8]. Contemporary surgical training includes procedure-based assessments that emphasise technique and decision-making[9]. Incorporating explicit handling of the spermatic cord and identification, preservation, or deliberate division of the ilio-inguinal nerve into these assessments would promote both safer practice and more complete recording.

Debate continues concerning optimal management of inguinal nerves during open repair[10-13]. Irrespective of the approach adopted, best practice demands that the surgeon records whether each nerve was identified, divided, preserved, or purposefully sought but not found. Routine inclusion of this information would close the current documentation gap and defend against litigation.

Incomplete intra-operative documentation in emergency inguinal hernia repair exposes patients and surgeons to avoidable risk; training curricula should therefore mandate the clear recording of spermatic cord handling and the search for, preservation, or division of inguinal nerves. Accurate notes underpin safe continuity of care, enable early complication detection, support quality-improvement audit, and strengthen medico-legal defence. Adoption of standardised electronic or paper templates, alongside emerging digital consent systems and AI-assisted documentation tools, offers a practical route to closing this gap.

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Category	Detail	n (%)
Consent form	Chronic groin pain mentioned	43/43 (100)
	Orchidectomy mentioned	6/43 (14)
	Testicular injury (isolated) mentioned	0/43 (0)
Operative report	Adequate description of repair	43/43 (100)
	Prosthetic mesh used	38/43 (88)
	Spermatic cord handling documented	35/43 (81)
	Ilio-inguinal nerve identified/preserved or divided	3/43 (7)
	Search for nerve documented	0/43 (0)

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