

The National Emergency Laparotomy Audit and older people living with frailty

The National Emergency Laparotomy Audit highlighted that older people living with frailty have poorer outcomes from emergency laparotomies. This editorial discusses some improvements in care that are needed to improve outcomes in this group of patients.

In excess of 40 000 emergency laparotomies are performed in the UK every year; half of these are performed in patients aged over 65 years old, and a fifth in those over 80 years old (National Emergency Laparotomy Audit, 2020). The National Emergency Laparotomy Audit (NELA) is an initiative commissioned by the Healthcare Quality Improvement Partnership. NELA recently published its sixth report into the care of 24 823 patients undergoing emergency laparotomy in England and Wales during 2018–19 (National Emergency Laparotomy Audit, 2020). NELA reported that the average hospital stay was 15 days compared to 19.2 days in 2013; 30-day mortality has also improved from 11.8% to 9.3%. However, these figures do not expose poorer outcomes observed for older people living with frailty; 18.1% of whom die within 30 days, compared to 6.3% of those without frailty. Indeed, the presence of frailty in the perioperative setting has been long established as a marker for patients experiencing longer hospital stay, higher rates of morbidity, higher mortality and increased level of care at discharge (Fehlmann et al, 2021). Improvements in care need to urgently focus on those most likely to experience poor outcomes – older people living with frailty.

Professional bodies and organisations such as the British Geriatric Society, Royal College of Surgeons, Royal College of Anaesthetists and the Centre for Perioperative Care have published guidance, supporting resources and recommendations to reduce variation, standardise care and scale up a systematic approach throughout the UK (Centre for Perioperative Care, 2020; Shipway et al, 2021). In turn, models of perioperative care for older people living with frailty are becoming better established throughout the NHS, with comprehensive geriatric assessment, shared decision making and medical optimisation contributing to both improved clinical outcomes and patient experience. In recent years, evidence has emerged showing the benefits of geriatrician-led liaison teams for older patients undergoing emergency laparotomies. Organisational reports from NELA have demonstrated striking reductions of 30- and 90-day mortality, with an odds ratio 0.35 (95% confidence interval 0.29–0.42) and 0.64 (95% confidence interval 0.55–0.73) (Oliver et al, 2018; Aitken et al, 2020), as a result of models of multiprofessional perioperative care, with comprehensive geriatric assessment, shared decision making and medical optimisation.

Geriatric medicine

Geriatric medicine services for surgical patients have increased from 38 centres (29.2% of trusts) in 2013 to 81 (53.3% of trusts) in 2019 (Joughin et al, 2019). Despite this increasing interest in perioperative care delivered by geriatricians, the percentage of older people undergoing emergency laparotomies who receive perioperative geriatric review has increased slowly from a meagre 10% in 2014 to 30% in 2019. This falls short of the 80% benchmark set by NELA. Furthermore, the mean national figure for older patients undergoing emergency laparotomies who receive geriatrician review appears to be driven by high performance in a small number of well-resourced centres, with approximately two-thirds of older patients undergoing emergency laparotomies receiving treatment in a centre that does not have a service providing geriatric medicine support to emergency

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general surgery. According to the 2019 Royal College of Physicians consultant census (Trudgill et al, 2020), close to half (43%) of advertised consultant posts in medical specialities including medicine for the older patient in England and Wales were unfilled because of a lack of suitable applicants (before COVID-19), and hence it is likely that those centres already under strain will feel further pressure on this finite resource. Before the COVID-19 pandemic, geriatricians in the UK were already heavily committed to selected and unselected general medical admission services. UK geriatricians also manage large numbers of inpatient beds, deliver post-acute care rehabilitation, routine outpatients and are increasingly expected to participate in community medicine to support primary care and admission avoidance schemes.

The COVID-19 pandemic has placed unprecedented pressure on existing geriatric medicine services. In some centres this has resulted in the necessary withdrawal of funded time for emergency laparotomy and a retreat to core medical inpatient care. According to an interim NELA report between 23 March 2020 and 30 September 2020 (NELA Project Team, 2021), there was a significant reduction in the number of emergency laparotomies carried out in older individuals, with 18.8% over the age of 65 years compared to 56% in the previous year. Out of a total of 10 546 patients of all ages, 867 (8.2%) undergoing emergency laparotomies had a diagnosis of COVID-19 with a mortality of 12.5% vs the mortality in those without COVID-19, which was 7.2%. These data require further exploration to understand the process of surgical decision making with older people, and whether the reduction in geriatric medicine input had an effect.

Funding and planning services

In order to safeguard access to geriatrician review for older people undergoing emergency laparotomies, long-term funding and service planning are needed. Initiating a best practice tariff has the potential to provide a financial incentive for geriatrician review, which may be expected to reduce heterogeneity of service provision and healthcare inequalities in older people. This approach has been successful within hip fracture care, with reductions in mortality linked to the number of geriatrician hours financed within a trust. Furthermore, improvements in mortality and length of stay appear to correlate to units achieving high level best practice tariff payments (Oakley et al, 2017). As the NHS is reorganised in a post-pandemic landscape, financial incentives are likely to evolve. A recent focus on payment by results may be replaced by block contracts, based on as-yet-undefined quality indicators set through integrated care systems. Irrespective of the financial system adopted, the incentivisation of geriatrician-led multidisciplinary support for patients undergoing emergency laparotomies must be secured to ensure continued improvement in evidence-based patient outcomes.

Conclusions

Much has been achieved in recent years, but further work is required to improve patient and carer experience, as well as clinical outcomes. Further research into cost-effective models of care is needed to allow multiprofessional national consensus and the development of guidelines. Benchmarking initiatives such as Getting It Right First Time and NELA will continue to support policy development. However, educational resources and practical guidance may also contribute to service expansion. If these tools can be combined with a financial incentive from central government, emergency general surgery services can be upgraded to meet the needs of the highest risk patients.

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Key points

- Despite improved clinical outcomes in emergency laparotomy in recent years, older frail persons are three times more likely to die within 30 days of surgery compared with those not living with frailty (18.1% vs 6.3%).
- Models of multiprofessional perioperative care, including comprehensive geriatric assessment, shared decision making and medical optimisation, contribute to improved clinical outcomes and patient experience.
- Despite an increase in overall numbers of geriatric medicine services delivering care for surgical patients, only one in three older frail patients undergoing emergency laparotomy are reviewed by geriatricians in the perioperative period.
- Educational resources and practical guidance must be combined with a financial incentive from central government to provide emergency surgical services with the resources necessary to meet the needs of the highest risk patients: those living with frailty.

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