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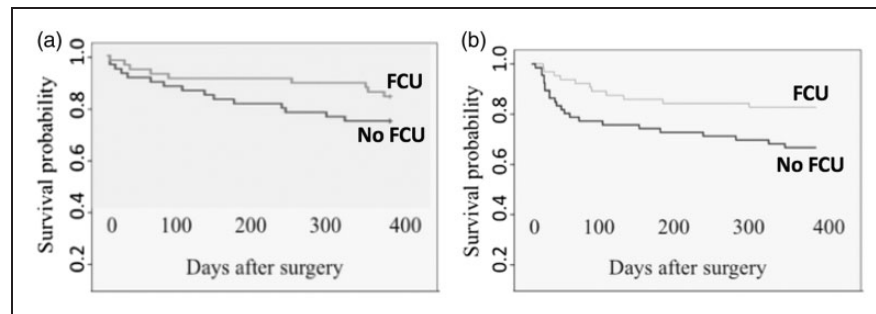


Figure 1. Kaplan–Meier survival curves of two studies, comparing mortality 12 months after hip fracture surgery in patients who received preoperative focused cardiac ultrasound (FCU) and patients who did not receive preoperative FCU. (a) Pilot prospective randomised controlled trial of 100 patients.¹ (b) Retrospective study of 130 patients.²

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In 2018, our group reported in *Anaesthesia* the results of our pilot multicentre randomised trial of the impact of preoperative focused cardiac ultrasound (FCU) on mortality and morbidity in patients having surgery for femoral neck fractures.¹ One hundred hip fracture patients were randomised to either FCU or no FCU before surgery. Our primary purpose was to

demonstrate protocol feasibility for a subsequent definitive trial.

While the pilot study was not powered to detect a difference in mortality, we reported a 6.1% 1-month mortality (3/49) in those patients who underwent

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FCU compared with 9.8% (5/51) in the control group [odds ratio (OR) 0.6, 95% confidence intervals (CI) 0.14–2.66].

Our group now reports a pre-specified secondary endpoint of all-cause mortality at 12 months. At one year, mortality was 18.4% (9/49) in the FCU population and 29.4% (15/51) in the control group (OR 0.63, 95% CI 0.25–1.3), which is shown in Figure 1a.

This group separation is consistent with earlier findings in a retrospective cohort study reported by Canty et al. of 130 hip fracture participants in whom mortality was 50% lower 12 months after surgery in participants receiving FCU (17.1% versus 33.3%, $P = 0.031$) and hazard ratio of death at 12 months was reduced after adjustment for known risk factors (OR 0.41, 95% CI 0.2–0.85, $P = 0.016$), as shown in Figure 1b.²

These findings suggest that preoperative FCU may have an effect on mortality. To resolve this uncertainty, a multicentre, randomised controlled trial, powered for a patient-centred outcome, evaluating the effect of preoperative focused cardiac ultrasound in patients undergoing hip fracture surgery is required.

Declaration of conflicting interests

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