Pain management in older persons with hip fractures

av

Pär Wennberg

Akademisk avhandling

Avhandling för medicine doktorsexamen med inriktning mot hälso- och vårdvetenskap, som kommer att försvaras offentligt fredagen den 18 oktober 2019 kl. 09.00, Hörsal C1, Universitetssjukhuset Örebro

Opponent: docent Bengt Nellgård
Sahlgrenska Universitetssjukhuset, GU, Göteborg

Örebro universitet
Institutionen för hälsovetenskap
701 82 ÖREBRO
Abstract


The overall aim of this thesis was to evaluate the preoperative management of pain from the perspectives of a literature overview, emergency medical service pain management, an intervention with a fascia iliaca compartment block and the association between cognitive status and the treatment of pain. Paper 1 is an integrative review of the literature on emergency care in patients with hip fractures or suspected hip fractures. Pain is a major problem for patients suffering a hip fracture when waiting for surgery and it is challenging for health care to provide sufficient pain relief. Listening to the patient’s narrative and the mandatory use of pain scales and pain documentation are necessary to deepen our understanding of individual patients’ needs. Paper 2 is a prospective observational study that explored the prehospital pain levels in 1,426 patients with suspected hip fractures. Furthermore, this study evaluated prehospital pain management. At the site of the injury, patients with hip fractures are often in substantial pain. Seventy-five per cent of the patients received pain relief from the emergency medical service (EMS) care providers and the pain relief was often effective. Several of the patients that did not receive prehospital pain relief had moderate to severe pain. Paper 3 is a randomised placebo-controlled double-blind trial (RCT) of 127 patients waiting for surgery. This RCT evaluated the effect of fascia iliaca compartment blocks (FICB) in relation to pain and medical pain relief, when added to regular preoperative analgesia. FICB improved pain relief when compared with regular analgesia alone (p=0.002). Paper 4 examined whether preoperative pain management with FICB could have an effect on cognitive status in the same 127 patients that were included in Paper 3. No impact on cognitive impairment was proven in this study. Patients with severe cognitive impairment received significantly lower doses of prehospital morphine than patients with higher cognitive status. Prehospital and hospital pain management need to improve. Pain management is especially challenging in persons with cognitive impairment.

Keywords: Pain, Pain management, Hip fractures, Cognitive status, Nerve blocks, Emergency medical services

Pär Wennberg, School of Health sciences
Örebro University, SE-701 82 Örebro, Sweden, par.wennberg@vgregion.se