

Evaluation of Regional Anaesthesia Practice in Plastic Surgery: A Retrospective Cross-Sectional Study

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Abstract : Regional anaesthesia has been associated with favourable outcomes in patients undergoing a wide range of surgeries. Beneficial effects have been demonstrated in terms of postoperative respiratory and cardiovascular endpoints, 7-day survival, time to ambulation and hospital discharge, and postoperative analgesia. Our project aimed at assessing the regional anaesthesia practice in the plastic surgery department of Buckinghamshire trust and finding out ways to improve the service in collaboration with the anaesthesia team. It is a retrospective study associated with a questionnaire filled out by plastic surgeons and anaesthetists to get the full picture behind the numbers. The study period was between 1/3/2022 and 23/5/2022 (12 weeks). The operative notes of all patients who had an operation under plastic surgery, whether emergency or elective, were reviewed. The criteria of suitable candidates for the regional block were put by the consultant anaesthetists as follows: age above 16, single surgical site (arm, forearm, leg, foot), no drug allergy, no pre-existing neuropathy, no bleeding disorders, not on ant-coagulation, no infection to the site of the block. For 12 weeks, 1061 operations were performed by plastic surgeons. Local cases were excluded leaving 319 cases. Of the 319, 102 patients were suitable candidates for regional block after applying the previously mentioned criteria. However, only seven patients had their operations under the regional block, and the rest had general anaesthesia that could have been easily avoided. An online questionnaire was filled out by both plastic surgeons and anaesthetists of different training levels to find out the reasons behind the obvious preference for general over regional anaesthesia, even if this was against the patients' interest. The questionnaire included the following points: training level, time taken to give GA or RA, factors that influence the decision, percentage of RA candidates that had GA, reasons behind this percentage, recommendations. Forty-four clinicians filled out the questionnaire, among which were 23 plastic surgeons and 21 anaesthetists. As regards the training level, there were 21 consultants, 4 associate specialists, 9 registrars, and 10 senior house officers. The actual percentage of patients who were good candidates for RA but had GA instead is 93%. The replies estimated this percentage as between 10-30%. 29% of the respondents thought that this percentage is because of surgeons' preference to have GA rather than RA for their operations without medical support for the decision. 37% of the replies thought that anaesthetists prefer giving GA even if the patient is a suitable candidate for RA. 22.6% of the replies thought that patients refused to have RA, and 11.3% had other causes. The recommendations were in 5 main accesses, which are protocols and pathways for regional blocks, more training opportunities for anaesthetists on regional blocks, providing a separate block room in the hospital, better communication between surgeons and anaesthetists, patient education about the benefits of regional blocks.

Keywords : regional anaesthesia, regional block, plastic surgery, general anaesthesia

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