Prime Time for Paediatric Prehabilitation

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Prehabilitation: The process of enhancing an individual's functional capacity to enable them to withstand a forthcoming stressor.

Introduction and aims

While adult prehabilitation is becoming more widely established, paediatric prehabilitation, and in particular its evidence base, trails behind considerably. We aimed to investigate what is current UK paediatric pre-assessment practice and canvass paediatric anaesthetists' views on paediatric prehabilitation.



Methods

This was a cross-sectional observational study. An electronic questionnaire (SurveyMonkey®) on the subject of paediatric pre-assessment was circulated to all APAGBI members in August 2020. Free text comments were invited at the end of the survey. Ethics approval was not required for this study.

Results

132 responses were received from across the UK, split between teaching hospital (77%) and district general hospital (23%). Over 90% of respondents were consultant grade. 55% of respondents worked in hospitals with face to face paediatric consultant led preassessment clinics, increased to 71% for nurse-led pre-assessment.

"Every child having a GA for a procedure/operation should expect to receive preoperative assessment that meets the medical, physical and emotional needs of that child" – APAGBI website

optimisation of conditions such as diabetes and anaemia, dietary and exercise advice, psychological and anxiety management, and smoking cessation guidance?

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Strongly Agree Neither Disagree Strongly agree agree nor disagree

disagree

Do you think there is a role for 'prehabilitation': Medical

85% of survey respondents either agreed or strongly agreed with the statement: "Giving perioperative advice and optimisation in the few weeks prior to surgery can improve patient outcomes in high-risk patients."

Common themes from respondents' free text comments were that current pre-assessment services are typically set-up to address paediatric anxiety but management of more complex comorbidities was deferred to the GP, paediatricians or surgical team. Anaesthetists frequently described themselves as coordinators addressing these patient needs, usually by necessity rather than design. Multi-disciplinary clinics were felt to be important. Childhood obesity was a recurring issue and the teachable moments during pre-assessment were often missed. One respondent mentioned recently encountering a 14-year-old who had "given-up" smoking, having smoked since the age of 11.

Discussion

These results show APAGBI members feel there is a need for paediatric prehabilitation and that this should be multi-disciplinary involving (among others) dieticians, physiotherapists and play therapists. An evidence base is clearly necessary when trying to justify the business case for such a programme.

Paediatric surgery represents a golden opportunity for triggering behavioural change early in a child's formative years. The diet and active living modifications may prevent obesity-related complications developing in later years. There may be a case for adoption of prehabilitation in all patients, thinking of the programme as a broader social intervention rather than purely preparing the child for the immediacy of surgery.



Conclusion

We need well conducted randomised controlled trial data in children targeting specific interventions with consistent outcome measures. It may be finally time for a national research project to establish an evidence base for paediatric prehabilitation.

