The child's experience; 1973 vs. 2013

Dr Peter Featherstone
Specialty Registrar in Anaesthesia and Intensive Care Medicine, East of England Deanery
Member of Council, History of Anaesthesia Society
2011 Rod Calverley Fellow, Wood-Library Museum of Anesthesiology, Park Ridge, Illinois

'Excepting in case of urgency…no conscious child should ever see the operating theatre or be submitted to the terrors associated with the induction of anaesthesia.'[1]

H K Ashworth, Anaesthetist to the Manchester Royal Infirmary, 1936.

As the Association of Paediatric Anaesthetists of Great Britain and Ireland celebrates its 40th Anniversary, it seems timely to reflect on the myriad of scientific and technological advances that have revolutionised paediatric anaesthesia over the past four decades. Whilst many of these have radically altered the lives and day-to-day clinical practice of those working in the subspecialty, children seldom document their own experiences of anaesthesia and thus it is more difficult to determine the changing perspective of the child.

Some clues may be obtained from the anaesthetic literature. For instance one paediatric study published in the *British Journal of Anaesthesia* in 1973 concerned the merits of combined hypnotic and tranquilising premedication to reduce the incidence of anxiety and apprehension in the anaesthetic room[2] and another the employment of ketamine in poorly co-operative children requiring multiple anaesthetics for radiotherapy.[3] Forty years later papers in the same journal include a comparison of propofol and fentanyl for the prevention of emergence agitation,[4] an assessment of the effect of intravenous fluids on post-operative vomiting following tonsillectomy[5] and an evaluation of single-breath vital capacity high concentration sevoflurane with or without nitrous oxide as a rapid and 'needleless' induction technique.[6] Taken together these articles hint at the significant emphasis that has been placed on the amelioration of fear, management of pain and avoidance of nausea and vomiting in paediatric anaesthesia over the past four decades. Importantly however awareness of the importance of these factors and attempts at their eradication began many years before the foundation of the APA. Furthermore there are many other influences which impact on the experience of the child in 1973 compared with 2013. Separated by four decades of social, political and economic change, enormous transformations have taken place in almost every aspect of children's lives as well as the way they are thought about and treated. In fact, to truly understand the changing experience of the child undergoing anaesthesia over

the past 40 years, we will need to trace all of these factors back far beyond 1973 - to the birth of modern anaesthesia itself.

This presentation will begin by reviewing the social status of the child in the mid 19th century and the attitudes of early anaesthetists towards the management of infants and children undergoing surgery. Regarded simply as small adults, little differed in their approach to paediatric patients until the 1900s when far sighted individuals such as James Gwathmey first highlighted the special needs of this population and the requirement to control their fears.[7] Studies looking at a host of sedative agents appeared over the following half century and avoidance of the 'nightmare of fear' in children undergoing anaesthesia was even used as a marketing tool by drug companies.[8]

Concomitantly change occurred in the way children were cared for in hospital. During the early and mid twentieth century hospitalised children were placed on adult wards, expected to conform to strict rules and routines and not allowed to play. Furthermore parental visiting was heavily restricted. An audit by the Central Health Services Council in 1953 revealed only 23% of hospitals allowed daily visiting by parents and 11.5% prohibited it.[9] Indeed some institutions excluded parents from the wards all together, believing it to be in the best interests of the child.[10] In 1959 the publication of the Welfare of Sick Children in Hospital report[11] (commonly referred to as the Platt report after the Chair of its committee, Sir Harry Platt) ushered in a gradual revolution for children and their families. Stating 'greater attention needs to be paid to the emotional and mental needs of the child in hospital', the Platt report led to the establishment of the National Association for the Welfare of Children in Hospital whose members successfully campaigned for radical changes in parental access and the setting up of specialist children's services. While a dramatic increase in the volume of day case paediatric surgery and day-of-surgery admission have reduced the amount of time children spend in hospital perioperatively, the majority of paediatric wards now offer open visiting and overnight stays for parents, who are also routinely allowed to be present at the induction of anaesthesia. The evolution of topical local anaesthetics as well as smooth inhalational and intravenous induction agents have significantly improved the child's experience of this phase of anaesthesia just as effective antiemetic medications and the development of paediatric pain protocols have improved wake-up and recovery. Finally today's children are well informed thanks to the free availability of age-appropriate explanatory guides to having an anaesthetic.

References

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