



## Temper tantrums after a hospital stay: researchers explore why

30 April 2019

Temper tantrums, nightmares and disrupted sleep are just some of the behaviours that young, healthy children may experience after a minor day procedure in hospital and a new research project has been trying to find out why.

Dr Paul Lee-Archer, a specialist anaesthetist at the Queensland Children's Hospital in Brisbane is exploring if behaviour changes in healthy children up to a month after their hospital procedure could be linked to the type of anaesthesia they were given and how it was administered.

Findings of the study of 249 two to seven year olds will be presented at the Australian and New Zealand College of Anaesthetists' (ANZCA) annual scientific meeting in Kuala Lumpur.

One third of the children were given the anaesthetic sedative dexmedetomidine before their procedure as a nasal spray, one third received the same anaesthetic as an intravenous sedative during their hospital procedure and a third were given another anaesthetic.

The children, who had no underlying medical conditions, had undergone simple day procedures such as minor plastic surgery, ear nose and throat procedures or hernia repairs.

The children were followed up at days three, 14 and 28 after their procedures and their behaviour changes monitored.

Dr Lee-Archer said while nearly half of the children had some negative change in behaviour in the first month after their procedures it was unclear whether these changes were due to the anaesthetic, the surgery or anxiety related to the procedure.

"The theory behind what causes these changes in behaviour is not fully known. We don't know why it happens. It may well be related to the stress and anxiety about coming into hospital."

"Parents might say things such as 'they're like a different child' or 'they're not acting the same'. Most of the time it simply resolves over time and the child settles down. But some studies show that some kids can have persistent problems up to a year afterwards and some are affected more than others," Dr Lee-Archer said.

"The days after a hospital procedure can be a stressful and difficult time for parents because they may have to take additional time off work and the children may feel unsettled."

Dr Lee-Archer said the ANZCA-funded RAD KIDS (Reducing Anxiety with Dexmedetomidine in Kids) trial highlighted the challenges for anaesthetists and anaesthesia research as much was still unknown about how the brain works.

"There are many reasons why it could be happening. It might be the anaesthetic but we can't say for sure. The vast majority of cases will resolve without any further treatment so we can reassure parents that we don't need to change our current practices.

"Our advice to parents is to make parents aware that their children can have behaviour changes after their hospital procedures. While we don't know yet how these changes can be prevented in children these behaviour changes will go away."

More than 1900 anaesthetists, pain specialists and other medical practitioners have gathered for the ANZCA meeting *New worlds come explore* at the Kuala Lumpur International Convention

Centre. The meeting features dozens of significant research papers, workshops and presentations on clinical and scientific advances.