Tricia’s medicine

Children need to lie still for long periods during MRI scans, which can be tricky. But a nurse-led sedation service has overcome these problems.

Lynne Pearce reports
TRYING TO get children to keep still is difficult enough at the best of times, but when they’re in a strange place, frightened and being asked not to make a move for anything up to an hour-and-a-half, it’s almost impossible. That’s why most children who need to have magnetic resonance imaging (MRI) are sedated, as even the smallest movement is likely to cause the lines of the scan to blur, jeopardising the possibility of achieving a good clinical diagnosis.

But giving children a sedative that is powerful enough to ensure they remain asleep, even if their appointment is delayed and they are moved from room to room, proved a difficult task.

**Frustrating delays**

Great Ormond Street Hospital nurse Tricia Bennett discovered this problem when she began working with these children in 1994. ‘Sedation would be given by nurses on the ward, but by the time the child was moved to the MRI scanner as many as one in five would wake up,’ she explains. If that happened, the scan would be cancelled and instead the child would be recommended for a general anaesthetic with a waiting time of anything up to eight months. ‘Some days no children would be scanned at all, because everyone woke up. It was frustrating for everyone – the child, the parents, the radiographer and the nurses. It was also a waste of people’s skills and their time, as you may end up achieving nothing that day.’

Ms Bennett knew that something needed to be done and the team looked at various options, including employing a full-time anaesthetist to give every child needing MRI a general anaesthetic. But, given that the children might need to be scanned anything from four times in a fortnight to once every three months, depending on their illness, it was decided that this would be too distressing for the children and their parents and much more risky for their health. It was also the most expensive option.

**Anaesthetists**

Instead, the decision was made to begin the world’s first nurse-led sedation service, training Ms Bennett as the first nurse sedationist. To add to her long-standing experience working in both intensive care and paediatrics, she also completed a paediatric advanced life support course and then spent months shadowing anaesthetists, listening to children’s chests and learning from their practice. ‘I couldn’t have done it without my anaesthetist colleagues, who gave their strong clinical input from the beginning,’ says Ms Bennett.

The innovative service was finally launched in January 1996, with just one session a week carried out by Ms Bennett, with a doctor alongside. Five years later, she is senior nurse sedationist and one of three specially trained Great Ormond Street nurses who hold seven sessions a week between them. To date, they have sedated 4,000 children, achieving a success rate of 97 per cent and reducing the waiting time to three months or less.

The trained nurses are responsible for selecting who is suitable to have sedation and every child is given a thorough health check on the day they turn up for the procedure, with the team closely following a contraindication list. Afterwards, the parents are given a letter, detailing the precise medication their child has been given and when, just in case the child shows any ill effects. The nurses are also on standby and can be bleeped if a parent needs any more information or reassurance. Following their training, the nurses are reassessed quarterly to ensure that their practice is as up-to-date and as safe as possible.

The team has brought about a number of changes to the service, including the pre-procedure starvation policy. ‘We used to tell parents that their child shouldn’t be allowed to eat for six hours before their sedation,’ Ms Bennett explains. ‘Now we’ve reduced that to four hours, but we also allow the child to have clear fluids up to two hours before. What it means is that the children are less distressed and manic. We also ask parents to keep their child up late the night before their scan, get them up early and don’t let them drop off in the car. That way, when they get here they’re already exhausted and ready for sleep.’

All the drugs used are oral and the nurses call them ‘dinosaur juice’ or ‘magic potion’, colouring them with the child’s favourite squash. ‘We do whatever makes the child feel better,’ says while they’re sedated. They don’t notice the cream because they’re so proud of themselves.’ Once the child has taken the sedative, the lights are turned down and they can relax in comfortable chairs. Staff ensure the trolley is by their side and the MRI scanner close by, so there is little chance of them waking up before the scan is completed. ’We’ve also brought the whole service in-house, so that the same nurse who sees them initially also gives them the drug, sits with them until they fall asleep and is there when they wake up. In the past, up to three people would have done the different aspects of this care. Now the children come to trust you and you get to know them – they’re not just sleeping bodies,’ says Ms Bennett.

**Spaceship**

‘It’s a very frightening thing for a child to have to go through, but we try to make it less scary by calling the MRI scanner our spaceship. We’ve even drawn pictures on the inside, so if a child chooses not to be sedated, we say “can you count the lion cubs for us while you’re in there?”’

So successful is the service, that Ms Bennett and her colleagues regularly receive visitors from abroad, keen to adopt Great Ormond Street’s pioneering idea in their own hospitals. And although no other hospitals in the UK currently offer the same service, the hope is that a new university module, validated by Southbank University and due to start running in the summer, will change that. Aimed at experienced nurses working with children who need sedation, the course will run for between four and six months, combining theory with a practice-based competency element.

But the true measure of success is the positive effect the service has had on both the children and their parents. ‘Some parents used to insist that their child had a general anaesthetic because they would be so distressed by MRI, but now they ask for “Tricia’s medicine”. Some even have the confidence to be scanned without any sedation at all,’ says Ms Bennett. ‘It’s so much better for everyone.’

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