The Airway Intervention Registry (AIR)

BY STEVEN POWELL

Many of our readers will be familiar with conducting endoscopic balloon dilatation procedures. **Steven Powell** speaks to ENT and Audiology News about the new Airway Intervention Registry which has been set up to collect robust data on the safety and efficacy of this technique.

So tell us what is the AIR?
The Airway Intervention Registry (AIR) is a new national registry to capture information about endoscopic balloon dilatation procedures for subglottic or tracheal stenosis in children.

AIR has been set up through collaboration between The Newcastle upon Tyne Hospitals NHS Foundation Trust, National Institute for Health and Care Excellence (NICE) and the British Association for Paediatric Otolaryngology (BAPO). The registry is hosted on the N3 (NHS) network.

Why was it set up?
Balloon dilatation procedures to treat subglottic or tracheal stenosis of the airway are currently covered by NICE Interventional Procedure Guidance (IPG425, April 2012). NICE states that current evidence on the safety and efficacy of endoscopic balloon dilatation for subglottic or tracheal stenosis is inadequate in quantity and quality, therefore the procedure should only be used with special arrangements in place. These arrangements involve informing the local clinical governance lead, informing patients of uncertainties about the safety and efficacy of the procedure, and entering paediatric patient data in the Airway Intervention Registry (AIR). NICE wants to encourage evidence development to inform any future update of its guidance, so that there are more robust data on the safety and efficacy of the technique. Due to the relatively small numbers, a clinical trial would not be suitable for this and the decision was taken to pursue a registry model to capture real world data on the procedure and its use.

Who can join?
The registry is open to UK clinicians treating stenosis of the trachea or larynx with balloon dilatation. Primarily this is likely to be ENT surgeons, but will also include some cardiothoracic surgeons and interventional radiologists. It is intended that consultants are primarily responsible for the data input, but fellows or registrars can register so that they can also input data.

What are you hoping to achieve?
The registry went live in April 2015 and is open for a two-year period. During that time we hope to capture the majority of UK paediatric balloon dilatation procedures. We have had a very positive start so far, with a large number of clinicians registering. At the end of the two-year period we aim to have the most robust prospective, multicentre data on this procedure that has been achieved to date, and this should allow us to give definitive answers on the efficacy and safety of the procedure. The ability to perform sub-group analyses has been built into the data collection. This will allow analysis, for example, by type of stenosis or patient factors so that groups in which the procedure can be more effective may be identified.

The data from the AIR project, together with any new evidence in the published literature, will be reviewed by NICE in consideration of a future update of IPG425.

What are the advantages to clinicians performing these procedures?
We have designed AIR to be as user friendly as possible. It takes less than 10 minutes to input data for a patient. Once a patient is entered, the system will retain their details and present them back to the clinician on next opening that case, so that further entries require less work. We are working towards graphical output from the registry so that clinicians can monitor the stenosis in a graphical way in terms of size and the procedures

AIR Registry

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performed, which will hopefully provide a helpful tracker for individual patients.

The need to participate in audit of our own practice is a mandatory General Medical Council requirement for clinicians and this is a good way to engage with that requirement for revalidation purposes. And of course, NICE have stipulated that clinicians who carry out this procedure should enter data into the registry as part of the special arrangements for conducting balloon dilatation in these patients.

What are your future plans for this registry?

After two years we will be analysing the data, and then disseminating the results through conferences and publication. The findings will also be submitted for peer-reviewed publication, with AIR contributors either acknowledged or invited to co-authorship as appropriate.

What about doctors from outside the UK, can they join?

At present we are only collecting data from UK clinicians.

What does one do next? When is the deadline?

To obtain a user account or for any queries, please email RMPD.Evaluation@nuth.nhs.uk.

The register is funded by NICE until April 2017. Clinicians can join any time, but the sooner the better so that we can collect evidence on longer term efficancy and safety outcomes.

What next for AIR?

We will evaluate the outcomes after April 2017, and then will be discussing with BAPO where to go next with the procedural registry.

Any other useful resources or websites you'd like to mention?

The NICE interventional procedure guidance:
http://www.nice.org.uk/guidance/ipg425

A demonstration version of the registry (available on the N3 NHS network only):
https://registers.nuth.nhs.uk/airBDdemo/

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ABOUT THE AUTHOR

Steven Powell is the clinical lead for the database and the chair person for the AIR national steering group. Steven became involved when the NICE External Assessment Centre (EAC) based in Newcastle successfully bid for the work from NICE and he became a local adviser and then clinical lead.