

Exciting News Today

2007

Issue 1



Highlights:

- Introducing a new and informative newsletter
- Biofilms– what are they and why they are important
- Childhood snoring linked to abnormalities in neuro-cognitive development
- Blowing balloons in the sinuses
- BOTOX– it's not just for wrinkles

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Welcome to the first issue!

It is an absolute pleasure to present you with the first issue of ENT: Exciting News Today. Every few months a new edition will be released and will contain updates on the expanding knowledge in the specialty of ENT, Head and Neck Surgery.

In this issue we cover a range of topics including biofilms, the affect of upper airway obstruction in children whilst they sleep, and evolving techniques in sinus surgery.

This newsletter is predominantly aimed at the GP but please feel free to include it amongst the reading material you have available for your patients in your waiting areas.

If there is a particular area of interest that you have, please email us a question. Each issue there will be a section dedicated to answering those that are most commonly asked.

As this is the first edition, I have kick-started it with some examples. If there is a significantly strong interest on a particular topic, then an article will be written to discuss the issue.

On a personal note, my wife Megan, my son of 6 weeks Adam, and myself are very excited by the prospect of joining the Fraser Coast community. We hope to contribute not only through the services provided by ENT Specialists, but also in many other ways.



Our logo was designed by the mother of a patient David helped. It features the Ear Nose and Throat in blue.
Thanks Melissa.

We look forward to your support and feedback on how we can serve you better.

Dr David McIntosh
MBBS PhD FRACS.

Misuse of Over the Counter Nasal Sprays

Chronic sinus sufferers and those with perpetual blocked noses may use topical decongestants in an attempt to combat their chronic congestion. Whilst appropriate for short term relief, prolonged use is harmful.

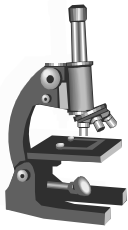
Nasal obstruction is a subjective experience and is related not only to adequate air flow through the nose but also adequate sensation of this airflow.

Patients with chronic rhinosinusitis often experience nasal blockage.

Not infrequently this is due to mucosal oedema and mucus build up impairing the sensory experience.

Surgical intervention for true physical obstruction is helpful when appropriate medications fail.

Biofilms



99% of bacteria live in a biofilm environment

We now know that bacteria live in 2 states— an active dividing state where they are free floating and a dormant, low metabolic state where they live within a community environment. The free active bacteria cause acute infectious diseases whilst the dormant community bacteria lie innocuously on the surface. These dormant communities are known as biofilms.

The biofilm can be thought of as like slime. The bacteria

form a complex framework of sugar and protein complexes. Nutrients and waste flow through the community and antibiotics may have trouble penetrating into the system.

The low metabolic and mitotic rate of the bacteria means that they are not susceptible to bacteriocidal and bacteriostatic agents.

Another important aspect of biofilms is that they allow the exchange of genetic material that confers properties of

antibiotic resistance.

Biofilm related ENT diseases includes OME, chronic rhinosinusitis, and chronic tonsillitis.

With our emerging knowledge about biofilms, antibiotic use should probably be used cautiously to try and treat these conditions.

With bacteria spending 99% of their life in a biofilm environment new treatments will need to be developed.

ENT SPECIALISTS

- PAEDIATRICS
- SINUS AND NASAL ALLERGY
- SLEEP APNOEA
- MIDDLE EAR DISEASE
- FACIAL PLASTICS

The Child who Snores

Enlarged tonsils and adenoids are the main cause of sleep disordered breathing (SDB) in children.

SDB describes the spectrum of the degree of obstruction to breathing whilst asleep.

Obstructive sleep apnoea (OSA) is at the severe end of the SDB spectrum.

There is an increasing awareness of the link between SDB and daytime behavioural

problems in children.

Adenotonsillectomy is effective at improving sleep, daytime behaviour and quality of life.

Traditionally SDB was seen in otherwise normal children but with obesity on the rise this is likely to make the condition more prevalent and treatment more difficult as the soft-tissues of the pharynx increase in their laxity.

The incidence of SDB means that it is the primary indication for surgical excision of the tonsils and adenoids in children. It is estimated that SDB affects up to 10-20% of children.

The poor correlation between sleep studies with the severity of SDB highlights the importance of expert clinical assessment.



Treatment of allergic rhinitis and sinusitis improves asthma control.

Allergic Rhinitis and Asthma

The National Asthma Council Australia and the Australasian Society of Clinical Immunology and Allergy have released information focussing on the management of allergic rhinitis in people with asthma. The professional bodies recognise that the prevalence of allergic rhinitis is increasing. With approximately 20% of

adults and almost 10% of children affected by allergic rhinitis, it is becoming a major health and quality of life issue. The link between asthma and rhinitis is well known with up to 80% of patients with asthma also experiencing rhinitis.

Recent studies have suggested that allergic rhinitis is a risk

factor for developing asthma. In cases where rhinitis fails to respond to appropriate medical therapy, referral to ENT has been recommended to rule alternative diagnoses. There is evidence indicating that sinus surgery improves the ability for medical therapy to be efficacious in rhinitis, enhancing asthma control.

BOTOX in ENT

Clostridium botulinum is the bacteria that produces the infamous botulinum toxin. This is a deadly poison that works on nerve endings to paralyse muscle movement.

Currently, botulinum toxin is most commonly used in the facial aesthetic industry.

Clinical uses for this toxin in ENT include hemifacial spasm, post-Bell palsy and other facial nerve palsies, blepharospasm spasmodic dysphonia and Frey syndrome.

An exciting area of progress has been the use in children and adults who has problems with salivary control (drooling or sialorrhoea).

This involves the injection of the toxin, under ultrasound guidance, into the major salivary glands including the submandibular and parotid glands.

The toxin reduces salivary production and improves the lives of the patient and their carers.

In patients who have had head and neck surgery, including total laryngectomy and parotid gland surgery, botulinum toxin has proven to be very useful for the management of difficult post-operative situations such as swallowing problems and gustatory sweating.

So despite the automatic link people make between BOTOX and beauty, it has wide reaching value in a host of ENT medical conditions.



Botulinum toxin is not just for wrinkles.

OME Missed by Parents

A journal article in the European Journal of Pediatrics in December 2006 highlights the importance of vigilance in children with OME.

Whilst it has been commonly accepted that parents are well tuned in to their children's problems, this paper found that this may not be the case. The researchers found that parents of children screened

for hearing loss were only worried about their child's hearing in 19% of cases identified as having OME. The underlying issue, however, probably lies in the level of hearing loss that the middle ear fluid was causing. The researchers found variable degrees of hearing loss, from 3 to 40 decibels. It is generally accepted that hearing loss

greater than 20-25 decibels is significant. Hence, the presence of middle ear fluid is not the only issue. In children where the fluid persists for more than 3 months, is associated with speech or learning problems, or where there are complications then ENT Specialist assessment is warranted.

David McIntosh

MBBS

PhD

FRACS

Sinus Balloons

Sinus surgery has undergone major revolutions in the past decade. Once a feared procedure dominated by the dreaded nasal packing, newer endoscopic techniques allow day stay sinus surgery (even in children).

A topical technique is the use

of angiography balloons to dilate the natural sinus drainage pathways open, eliminating the need for bone removal.

The paper describing this technique gained such widespread media coverage in the USA that the American

Rhinological Society had to issue a press release expressing caution in using this method.

It was a very select group treated and the follow-up is currently inadequate. Hence, the current method of endoscopic sinus surgery is still the best surgical option.



New technique in the media but it's not time to party just yet

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Maroochydore
Noosa
Caloundra
Gladstone
Mackay
Mount Isa

Dr David McIntosh is an Australian trained and qualified ENT Surgeon. He currently is a registered with the following professional bodies:

- *Queensland Medical Board (Specialist Registration)*
- *AMA (Queensland)*
- *Aboriginal Indigenous Doctors' Association*
- *Fellow Royal Australasian College of Surgeons*

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Do you want to us to visit you?

We know how valuable your time is. That's why David is more than willing to come out and talk to individual GPs and GP groups. Please feel free to contact us on 07 54510333.

Let us know if there is a particular topic or area of interest and we will do our best to meet your needs.

GP QUESTIONS

This section of the newsletter will be dedicated to answering the questions of the local GPs (don't worry— no names mentioned!). So please feel free to email your queries to us at: the address above.

To start this, our inaugural newsletter, we have decided to ask our own questions, to give you an idea of what sort of help we aim to provide.

What is the role of oral antibiotics for discharging grommets? Purulent discharge from ventilation

tubes in a true nuisance.

However, it usually does not represent a serious disease process. In uncomplicated cases (eg no systemic upset, no local cellulitis, no mastoiditis) a combination of topical antibiotic (non-ototoxic) drops and water precautions should suffice.

Can the adenoids grow back after surgery? In short— yes. The adenoids are part of the mucosal associated lymphoid system and occupy the post-nasal space. Owing to the adjacent structures such as the skull base, carotid arteries, and

cervical spine, caution is taken when they require removal. As a result, some adenoidal tissue is occasionally left behind. This tissue may continue to grow in size, with further removal required in the future.

Do antibiotics help treat OME? This is an exciting area of debate and research. There are a multitude of issues regarding definitions and diagnostic certainty. The answer is probably “no” given that we currently think of OME as a biofilm disease. See inside for more about biofilms.

Got a question?

Email us and we will print the most common queries in the next issue.