Offspring
Child Health Specialists

LET OUR FAMILY CARE FOR YOURS

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Tea Room News

Offshoot - Winter is coming!

Winter has arrived and along with it comes cold and flu season. For parents with young children particularly those attending daycare and school, this can often be a difficult time with children experiencing frequent respiratory ailments. In this issue of Offshoot we talk about common winter illnesses and provide tips on when to seek further medical support.

Q: Did you hear the story about the germ?

A: **Never mind. I don't want it spread all over.**

How many viral infections can be expected in young children?

Paediatricians are often asked how many infections are too many? It is not uncommon for parents of young children to feel concerned that their child is "sick all the time". What we know from research is it is normal for children to have 6 to 8 colds per year and up to 6 ear infections per year within the first few years of life. We also know that these numbers may be even higher for children who attend daycare compared to those whom remain at home with a carer.

With these figures in mind, it is understable why respiratory tract infections are the most common reason for childhood presentations to general practitioners or paediatricians. While the majority of these infections are caused by viruses and may simply require reassurance and symptomatic management, there are instances when further concern is warranted (see tables below). An improved understanding of the common types of infections during winter and how long you expect them to last aids this process.

Dr Sarah Donoghue
Paediatrician & Metabolic Physician

Mr Hari Jeyarajan
Paediatric ENT,
Head & Neck Surgeon

Dr Jacinta Coleman
Paediatrician & Adolescent Physician

Common types of infections

BRONCHIOLITIS

Bronchiolitis is a common condition seen in infants under 12 months and results from inflammation in the smallest passages of the respiratory tree, the bronchioles. Bronchiolitis usually has a pattern of 2-3 days of cold-like symptoms followed by 3 days of rapid and increased work of breathing (chest wall retractions or nasal flaring); noisy breathing (wheeze); lethargy and poor feeding. Symptoms gradually subside over 7-10 days, with a dry cough sometimes persisting for several weeks. Treatment is usually supportive although admission is required when children are reluctant or unable to feed, working very hard (respiratory rate > 70bpm or severe chest wall recessions), becoming lethargic or require supplemental oxygen to maintain their oxygen levels (i.e., SaO2 <92%). Other groups at higher risk that may require admission include, premature infants, babies under 3- months of age and children with chronic diseases relating to the heart, lung or brain.

CROUP

Croup is a condition usually seen in infants and young children typically beneath the age of 5-years. It results from inflammation narrowing the upper respiratory tree at the level of the larynx, trachea and bronchi. Croup presents with a barking, seal-like cough, sometimes along with a harsh sound on inhalation called "stridor". All children with stridor require medical attention and benefit from short course of oral corticosteroids (e.g., Prednisolone 1mg/kg for 2 days). In circumstances where there is significant stridor at rest, marked work of breathing or lethargy parents should be directed towards the emergency department as they may require urgent nebulised adrenaline in addition to corticosteroids.

VIRAL INDUCED WHEEZE/ASTHMA

These conditions are similar to bronchiolitis in that they result from inflammation of the small airways and present with wheezing and a prolonged expiratory phase. Children may also present with tightness in the chest and increased work of breathing. Children with a viral-induced wheeze may be responsive to inhaled bronchodilators, such as Salbutamol (e.g., Ventolin). If children are working hard to breathe or require their Ventolin more frequently than 3-hourly then they should be observed in hospital to make sure that their Salbutamol requirement is able to be stretched safely to 3-4 hourly. Children with repeated episodes of bronchodilator responsive wheeze may

benefit from a preventer, particularly if they experience interval symptoms requiring Salbultamol 3 or more times a week. You can download an asthma interval symptom chart from ***www.offspring-health.com***. For children with recurrent or chronic symptoms, it is important to liaise with their paediatrician to ensure an asthma action plan is developed and provided to day-care or schools.

How to prevent repeated infections in children?

- While taking vitamin C may not prevent colds, taking vitamin C before the onset of cold symptoms may shorten the duration of the illness.
- Smaller home-care situations (with 5 children or less) may be more suitable for children susceptible to frequent infections i.e., fewer children mean fewer potential exposures to infections.
- Parents and immediate family members who are smokers should be encouraged stop smoking. Air filters or smoking in a different room do not protect children from the lung irritant effects of secondhand smoke.
- Some studies have shown that taking zinc regularly may reduce the number of colds each year, the number of missed school days, and the amount of antibiotics required in otherwise healthy children.

Q: How can you tell if a bucket is not well?

A: **When it is a little pale (pail).**

Dr Jeremy Rajanayagam
Paediatric
Gastroenterologist & Hepatologist

What about over-the-counter cough medicines?

In children, there is a potential for harm and no benefits with over-the-counter cough and cold medications; therefore, they should not be used in children younger than four years.

Dr Sam Mehr
Paediatric
Allergist & Immunologist

When to be concerned about recurrent infections?
4 new ear infections in one year after age 2-3
2 or more serious sinus infections per year
2 months course of antibiotics with no significant improvement
2 episodes of pneumonia per year
Failure of an infant to gain weight or grow normally
Recurrent abscesses
Persistent thrush in the mouth or persistent fungal infection on the skin
2 or more blood stream infections (septicemia)
A family history of immune deficiency

Features of severe bronchiolitis
Poor feeding (fluid intake <50% of usual, poor urine output)
Respiratory rate > 70 breaths per minute or Apnoea
Nasal flaring, grunting or severe chest wall recessions
Lethargy
Oxygen saturations <92%

Assessing severity of a child with croup

Mild: barking cough, no or intermittent stridor, no chest retractions

Moderate: persisting stridor at rest, some chest wall recession or tracheal tug, child easily pacified and interested in surroundings

Severe: persisting stridor at rest, marked tracheal tug

Dr Sarah Condron
Paediatric Surgeon

Latest Updates

- Congratulations Dr. Sarah Donoghue on your Oral Presentation at the MPS and Related Diseases Society 15th National Conference.
- Congratulations Dr. Jeremy Rajanayagam on your Young Investigator Award and Oral Presentation relating to Allograft Fibrosis after Paediatric Liver Transplantation at the 2017 Joint International Congress of ILTS, ELITA & LICAGE.
- Offspring is excited to launch SPIIK – Skin Prick & Immunotherapy In Kids. This service will be overseen by Paediatric Allergist & Immunologist Dr Sam Mehr.