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EXECUTIVE INDEX

Over the counter medications

Over the counter (OTC) medications are commonly used in the community. It is thought by many that they are safe because they are freely available and not regulated by prescription. Many are of unproven benefit, some preparations do more harm than good, others are toxic in overdose and interactions between OTC preparations and prescription medication can be harmful.

Analgesics and Antipyretics

Paracetamol

Panadol, Panamax, Dymadon

Paracetamol is probably the most commonly used OTC preparation used in Australia. While paracetamol is safe when recommended doses are used, in overdose it can cause liver failure. It is most often given as an antipyretic and although this is "safe", it is possibly unnecessary in a lot of cases and may be harmful. There is evidence which suggests that antipyretics can slow the body's response to viral illnesses.

Ibuprofen

Neurofen, Brufen

Ibuprofen has recently been made available as an OTC preparation in children and is being promoted as an alternative to paracetamol. It is a non-steroidal anti-inflammatory medication and is associated with a slightly increased risk of gastrointestinal side effects. There have also been cases reported of children developing renal impairment associated with ibuprofen use. It is recommended that caregivers:

- use paracetamol when appropriate
- not use ibuprofen for more than 3 days without medical supervision
- check ingredients of medications to avoid giving more than one ibuprofen-containing product at one time
- avoid giving ibuprofen during illnesses that are accompanied by vomiting, decreased fluid intake or diarrhoea.

Many parents will immediately give an antipyretic to their child the moment he/she develops a fever. There is concern that a high temperature will harm the child or may cause a febrile convulsion. Fever in itself is not harmful. Fever is a sign which suggests there is infection and it is the cause of the fever that is more important. While febrile convulsions do obviously occur associated with febrile illnesses, giving antipyretics does not decrease the incidence or likelihood of febrile convulsions. It is recommended that analgesics /antipyretics be given for pain or discomfort but not simply to "bring the fever down".

Decongestants

Oral decongestants

Dimetapp Elixir
brompheniramine maleate (antihistamine), phenylephrine HCl (decongestant)

Demazin Syrup
chlorpheniramine maleate (antihistamine), phenylephrine HCl (decongestant)

Nasal decongestants

Drixene, Vasylox

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Decongestants are widely promoted for the relief of symptoms of colds and flu. However, there is little evidence that the use of these agents gives any symptomatic relief in viral infections. They can in fact be harmful and are contraindicated in neonates. Often these medications are used for their sedative effect, however occasionally there can be a paradoxical effect with the child becoming hyperactive and restless.

Nasal decongestants can provide relief from a blocked nose in the short term, for adults, but may not be helpful in children under 12. When used for more than 3 to 5 days, nasal decongestants can cause reactive hyperaemia. This is rebound congestion after the medication is ceased. Decongestant nose drops are not marketed for use in children under 2 years and it is recommended that they be avoided in children. As an alternative, intranasal saline can be used, 0.5 ml in each nostril.

Promethazine

Phenergan

This medication is available over the counter and is used for sedation, allergy and viral infections. The use of promethazine has been linked to SIDS and as a consequence is not recommended for use in children under 2 years of age. In addition while it usually causes sedation, some children can react with hyperactivity.

Oral Rehydrating Fluids

For children suffering from Gastroenteritis, oral rehydration solution (ORS) is a balanced electrolyte solution that is easily prepared and is the optimal treatment for and prevention of dehydration. It is important that the instructions for preparing the fluid are followed closely, as an overconcentrated solution (not enough water or adding cordial) may cause diarrhoea in itself.

While ORS is recognised as being an excellent form of therapy, it is not appropriate to substitute ORS for breast feeding. Nor is it appropriate to take young infants off all milk and feed them only ORS. In general it would be recommended that infants who are exclusively milk fed, should not cease their milk intake.

Topical Agents

Skin conditions are quite common in childhood and moisturisers are common preparations used by parents. Often parents are advised to use the moisturisers in conjunction with steroid containing topical preparations and often are not sure of the difference between the two. It is paramount that the skin be kept moist and so moisturising agents need to be applied often and liberally. The topical steroids need to be used sparingly.

For conditions which cause dry skin such as atopic eczema, moisturising agents should be applied at least three to 4 times a day. Sorbolene or Sorbolene with 10% Glycerol, can be applied liberally all over the body. The topical steroids, which are often also used, need to be used only sparingly over the affected parts. For more severe eczema, Liquid paraffin 50%/white soft paraffin 50% should be used on the face and limbs. It is usually recommended that it not be used on the torso for prolonged periods as it can cause blocked pores and pimples.

Treatments for Constipation

Bulk Laxatives

Lactulose

Actilax, Duphalac

These work by trapping water in the stool and therefore producing a larger but softer stool. These can be helpful when a child is withholding faeces and suffering as a result of the stool becoming dry and hard. They are useful for maintaining soft stool.

Faecal Softeners

Liquid paraffin

Parachoc, Agarol

Docusate

Coloxyl

These are more effective in softening hard stools. Liquid paraffin is commonly used in children. Chronic use (>6 months) can lead to interference with the absorption of lipid-soluble vitamins. In addition, there are risks of inhalation lipid pneumonia. This is more of a problem in children who are at risk of

aspiration, such as children with CP and gastro-oesophageal reflux. Docusate, if used over a long period in conjunction with other medications may cause an increase in mucosal uptake of these drugs.

Stimulant laxatives

Bisacodyl

Durolax

Senna

Senokot

Stimulant medications are subject to abuse in adults and may cause interference with colonic motility. Senna appears to be most free of dangerous side effects. It needs to be used in conjunction with a stool softener to allow evacuation of old, retained stools and so as to diminish the likelihood of abdominal colic. Sufficient time needs to be allowed for the bowel habit to become established, sometimes up to a year.

Constipation is not an uncommon childhood problem. Many children for a combination of dietary and familial reasons suffer from infrequent, hard stools associated with abdominal pain and anal tears which exacerbate the problem. However, constipation can be a symptom of an underlying medical problem and whilst this is not the usual case, it is important that children are examined by a medical practitioner to exclude other causes. Generally, the younger the patient and the stronger the history of other GIT symptoms or failure to thrive, then the greater the need for investigation.

Conclusion

The use of OTC medications for minor ailments is commonplace in Australia. Some such as ORS and topical moisturisers have a role in therapy. However, some, such as decongestants are of unproven benefit and may have side effects. In some cases, OTC preparations may be contraindicated. Health professionals have a responsibility to ensure the appropriate use of OTC medications in children. Even in situations where there is a known benefit, it is important to ensure that they are not being abused.

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The truth about teething

What do you think about teething? You probably associate teething with irritability, drooling, red cheeks, and of course local itchiness and irritation of the affected gum. Diarrhoea, nappy rash, eczema, "strong urine", increased risk of infection, fever and sleep disturbances may also spring to mind. You are not alone: similar views are held by most parents and by many Maternal & Child Health nurses, chemists, general practitioners, dentists, and paediatricians randomly sampled across Victoria in surveys conducted by the Centre for Community Child Health in 1997.

But the truth appears to be somewhat different. The Centre has now completed a prospective study of children aged 6 months to 3 years in three Melbourne long day care centres. Every morning for seven months, parents reported on the presence of a range of common symptoms over the preceding 24 hours. Every afternoon for seven months, carers reported on the same symptoms over that day at creche. And in the middle of each day, a trained dental therapist examined the mouth, recording the presence of any new teeth and the stage of eruption, and checked each child's temperature.

More than a hundred teeth and two thousand child-days of data later, we have a picture of common disturbances experienced by these children. As expected, parents and carers reported many of the symptoms described above, and many teeth erupted. Surprisingly, however, we did not find temporal relationships between the "symptoms" and the teeth. In the earlier survey, parents had suggested various timings for symptoms in relationship to the eruption of new teeth; most commonly believed to occur in the few days leading up to the eruption, many also believed that they occur on the day of eruption, or the days both before and after eruption, or over a longer leadup. We checked out all these possibilities but could find no relationships, either for parent- or for carer-reported symptoms. Perhaps most importantly, fever did not appear to be associated in any way with teething. If you feel sceptical, remember that it was the parents and carers who reported the symptoms - the research team merely recorded the presence or absence of new teeth.

Beliefs about teething do have implications. Overall, 76% of parents in our earlier survey reported using some form of medication to manage teething symptoms, most commonly paracetamol (60%) and/or teething gels (55%). No parents reported using antibiotics, but some used natural/herbal medicines or mild sedatives. Professionals also reported recommending paracetamol and teething gels widely; of interest, 41% of the pharmacists in our survey recommended sedating medication (no doubt reflecting the time of night they see their "teething" customers!!).

Clearly, these time-honoured practices are not based on evidence. They may be reassuring to many. However, they may prevent parents from implementing simple, effective measures such as sleep and behaviour management programs, and they may be costly, with children receiving oral and/or topical medication over periods of months to years. They may also prevent prompt assessment and management of a range of illnesses such as urinary tract infection, gastroenteritis, and febrile illnesses, which on occasion may have serious consequences.

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