Child health case study: acute otitis media

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Child Health Portfolio Case

General Information

Report: Infant between 1-6 months of age

Sex: Female

Age: 4 months

CDC: Grassy Park

Disease Narrative

A 4-month-old girl, was brought into Grassy Park Community Day Clinic (CDC) by her mother, who was concerned that she was " pulling and touching her ears more than usual" for the past two days. Mrs X had taken her to visit a private doctor two weeks prior due to a " runny nose but she has otherwise been well since". The child now, in addition to presenting with ear problems, is " more irritable and restless" than normal and is " waking at night" from ear pain resulting in Mrs X to seek health care for her daughter. She does not have any discharge from her ear or associated fever and Mrs X has not attempted any form of treatment of the ear infection with home or over the counter remedies.

Mrs X, who works as a caterer in Kingsbury hospital, feared for her daughter's health after having " seen other children with ear infections display similar signs" and wanted to ensure that the problem was seen to by

a medical health professional as soon as possible. This is the first time this set of symptoms has occurred, and, other than the visit to the private doctor, the road to health card and mother both indicate the child is growing well and is “ is a happy healthy child.” As both the child’s parents work during the day time, she is looked after by a friend of Mrs X, who, in affectionate terms, is termed a “ day mother” by the family.

Health System Experience

Mrs X luckily has experienced health care from both the public and private health care system, with the choice of health care service dictated by many factors such as illness, time available and finances. On reflection she notes she is happy with the health care service provided by both the private and public system, but further goes on to say that within the private health care system it seems that the doctors and nurses “ go further” in providing all round health care, whereas in the public system it seems they just “ do the minimum in treatment in order to move patients along”. As a result, she “ enjoys the experience more” within the private health care system than that of the public healthcare system.

Mrs X does go on to note that at Grassy Park CDC appointment times and quick queues have made the experience better and under normal circumstances, Mrs X would have been able to arrive at the specified time for the appointment and not have to wait too long to be seen. In contrast, today, Mrs X arrived at the clinic at 9H00 without an appointment and would have otherwise waited for an extended period of time had not the medical students seen to her and her child. Mrs X notes this as an isolated incidence

in not having an appointment. The students performed a general examination which included weight, length, MUAC as well as a specific systemic examination of the ENT in order to investigate the complaint of an ear infection.

Generally, Mrs X also further goes on to note, the positive attitudes of the health care workers who; “ always give you the full information”, ensure that she is kept abreast of all the developments in regard to her daughter’s health and enquire after her health and the context of the family. This has resulted in Mrs X perceiving a high quality of care received from the CDC. Lastly, she made a call for “ more sisters, nurses and doctors”, as, although there is a high quality of care, she feels that as a result “ more patients could be helped and cared for” at the CDC.

Family and Financial Cost

Both Mr and Mrs X both work full time, thus having to take the child to the CDC or private doctor for a health issue is a burden on their capacity to earn and support their family. Nonetheless, Mrs X feels that it is worth the cost in her time as she wants to be “ in the consultation with her child, as then she knows what is wrong with her and how best to treat it”. Financially, attending a private doctor is only done when necessary, which is in contrast to the public health care system where the care is cheaper/free but can sometimes spend longer waiting and thus not earning money due to the time taken off work. Thereby, it seems it is a cost-benefit problem for the family as both Mr and Mrs X “ get paid monthly, they cannot absorb unexpected costs”. The family is otherwise under no heavy financial burden and receive no grant.

Mrs X notes a “ good value of service” received from the CDC and is always able to make time and money available for the small expenses required in the caring for of her daughter.

Preventable-Promotional Aspects

The child was confirmed to have an acute ear infection and preventable and promotional aspects of her care thereafter can be seen in three dimensions, mainly; downstream, midstream and upstream measures. Upstream and midstream measures would simply consist of general education and health promotion targeted towards carers of infants in order to allow them to care for/prevent ear infections in infants themselves and what danger signs warrant the seeking of medical attention.

Downstream would consist of treating the acute ear infection. Amoxicillin and Paracetamol syrup were prescribed and the mother health promoted on administration of medication, bottle hygiene, the Vitamin A and deworming schedule, and to return if danger signs noted.

Mrs X is aware of general ear care with regard to; not using ear buds to clean her daughter’s ears, not placing foreign objects within the ear canal, but is otherwise not aware or any ameliorating factors that may have prevented the ear infection in the first place. Upon further discussion, it is noted that when washing her daughter’s head, the ear does become submerged in the bath water and water does enter the ear canal which does worry Mrs X. Health education to alleviate the worry was conducted.

Pathophysiology

Acute otitis media is a common ear infection among infants where parts of the middle ear become infected and swollen with fluid build-up and entrapment behind the tympanic membrane. Signs and symptoms of acute otitis media can vary but usually consist of ear pain/tugging or pulling at the ears, trouble sleeping, ear discharge, restlessness. It aetiology is usually bacterial in nature and is often preceded by/associated with a sore throat or upper respiratory tract infection. Children and infants are more predisposed to acute otitis media due to the fact that the Eustachian tubes are smaller and more horizontal than in adults. This facilitates tracking up of bacteria and decreased drainage of fluid from the ear even in normal circumstances.

Local inflammation of the Eustachian tube and inner ear can cause blockage and thereby further encourage fluid build-up within the middle ear. Diagnosis is made by history and findings on general and ENT examination. Treatment consists of; an antibiotic (usually Amoxicillin), an analgaesic such as paracetamol or ibuprofen, a follow-up visit 5 days later and health promotion on general aspects of infant/child health such as immunisations and Vitamin A administration.

Research Articles

1. Kilpi T, Ahman H, Jokinen J, Lankinen K, Palmu A, Savolainen H et al. Protective efficacy of a second pneumococcal conjugate vaccine against pneumococcal acute otitis media in infants and children: randomized, controlled trial of a 7-valent pneumococcal polysaccharide-meningococcal outer membrane protein complex

conjugate vaccine in 1666 children. Clin Infec Dis. 2003; 37(9): 1155-1164.

2. Del Mar C, Glasziou P, Hayem M. Are antibiotics indicated as initial treatment for children with acute otitis media? A meta-analysis. BMJ. 1997; 314(7093): 1526-1526.