Ear infections can occur in both the outer parts of the ear (otitis externa) and the middle ear (otitis media). Otitis media is one of the most common infections observed in children; 60 – 80 percent of infants experience at least one infection before their first birthday and 80 – 90 percent of all children will have had otitis media by two to three years of age.

Bacteria and viruses are the cause of ear infections. Because infants and children between the ages of 6 and 18 months have an immune system that is not yet mature, and because the anatomical structure of the ear and skull differ from that of older children, they are at higher risk of developing ear infections. Other factors that increase the risk of contracting ear infections, include being exposed to tobacco smoke; being in a day care group; having a family history of recurrent ear infections in parents or other siblings; other underlying conditions like allergic rhinitis and the season of the year – infections more likely to occur during autumn and winter months.

Identifying otitis media in babies can sometimes be difficult, as the symptoms can be non-specific. Usually, there is a sudden onset of symptoms, including a temperature of 38 degrees or more, ear pulling, loss of appetite, not sleeping, fussiness, vomiting and diarrhoea. To be able to diagnose otitis media, the child should have symptoms of infection as well as visible changes in the eardrum (tympanic membrane) on examination. The eardrum appears red, cloudy and bulging on examination with an otoscope. Symptoms often appear after a cold or an upper respiratory tract infection.

Once the diagnosis has been established, various treatment options are available. Treatment with antibiotics may be required, as well as medication to relieve pain, inflammation and fever. Infants younger than 24 months are usually treated with antibiotics for a period of ten days, while older children may be given treatment for 5 to 7 days. Sometimes an observation period for 24 hours is recommended before antibiotics are prescribed, especially if the diagnosis is uncertain.

Untreated otitis media can lead to various complications like perforated eardrums, hearing loss, and middle ear effusion (when fluid builds up behind the eardrum). Babies with suspected ear infections should therefore be referred to a general practitioner should the symptoms persist.

Various precautions can be taken to help prevent ear infections in babies. Various vaccinations can help reduce the frequency of otitis media, e.g. the pneumococcal conjugate vaccine (Prevenar®). Other vaccines can help prevent illnesses caused by Haemophilus influenzae that may lead to ear infections. There is also some evidence that breastfed babies have a lower risk of contracting ear infections than bottle-fed babies.