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Barotitis in children after aviation; prevalence and treatment with Otovent.

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Barotitis is an acute or chronic inflammation caused by environmental pressure changes. The most common cause is the pressure change during descent in civil aviation. To prevent barotitis the middle ear pressure has to be equalised several times during descent. This can be achieved by performing the Valsalva manoeuvre, but for children, many of whom have a dysfunction of the Eustachian tube, this is difficult to perform and they are therefore at high risk of developing barotitis during flight. The traditional treatment modalities of barotitis are inflation by a Politzer balloon, myringotomy or prophylactic grommet insertion. An alternative treatment or prophylactic measure is autoinflation using the Otovent treatment set. This prophylaxis/treatment can be performed by the child with assistance from its parents as soon as possible or rather before the descent has started. The prevalence of barotitis amongst transit passengers was found to be highest in young children, 25 per cent, compared with adults, five per cent. Only 21 per cent of the youngest children with negative middle ear pressure after flight managed a successful Valsalva's manoeuvre, whereas 82 per cent could increase the middle ear pressure inflating the Otovent set. In conclusion we recommend autoinflation using the Otovent set by children and adults with problems clearing the ears during flight.

Publication Types:

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- Controlled clinical trial

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