

Otitis media: an age-old problem, but a current issue of contention

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I read with attention and with interest the article entitled *Secretion of middle ear in infants – occurrence, recurrence and related factors* published in the current edition.¹

The article describes a cohort study, undertaken over 4 years with the objective of evaluating the integrity of the middle ear/auditory tube complex of 190 infants not belonging to high-risk groups.

The study is well-designed and has undeniable scientific merits with unequivocal applications both in the areas of academic study and medical care. Among its many positive points, we have selected some features that we judge to be essential. Here are some comments:

- Being a prospective study makes serial data collection possible, checking the anatomophysiological status of these little patients' middle ears monthly. Thus, in contrast with traditional cross-sectional studies it offers us accurate data on the incidence of otitis media with effusion during the first 2 years of life, the dynamic behavior of the middle ear/auditory tube complex and the delicate balance of intratympanic pressure maintenance.
- In a similar sense, it measures, in a more subjective manner, the auditory health of those children suffering from middle ear effusion, theorizing on the possible damage that this sensory deprivation, while transitory, can cause to the process of language acquisition. On this subject it is worth pointing out that international studies are still debating the consequences of otitis with effusion (chronic or recurrent) during the first years of life on the complete development of linguistic abilities.^{2,3} We side with the authors when they state (empirically), in the introduction to their paper, "*the sensory deprivation resulting from OME, aggravated by the number and duration of episodes, can affect speech perception and make understanding more difficult*". In fact, we would go

further, since we believe that the presence of slow, but active, inflammatory processes (and possibly infectious), within the middle ear cleft and adjacent to the oval and round windows can, by means of middle ear/inner ear interaction mechanisms (overwhelmingly demonstrated in experimental studies performed by Paparella and Goycoolea), compromise labyrinthine homeostasis with consequent sensorineural damage to hearing and balance.^{4,5}

- The authors confirmed international figures on the high incidence rate of otitis media during the 2 first years of life, in addition to the disease's association with risk factors that are already well-known.⁶⁻⁹ The duplication of results reported by other centers of excellence, is not an indication of demerit, but, in contrast, demonstrates that the pathogenesis of otitis media is universal and that its natural history can be consistently abbreviated by identifying and controlling risk factors.

- One of the greatest merits of the study, in my opinion, is the warning signal that it gives for pediatricians and otolaryngologists to extrapolate the problem onto a wide section (70%) of the infant population. Only early diagnosis, periodic follow-up and, whenever necessary, firm therapeutic action can free a proportion of these patients from, in the future, living with the devastating sequelae and feared complications of a chronically infected ear.^{10,11}

- I would like to close by providing a punctual and extremely well-intentioned criticism. I do not like the term "secretion", which appears as a synonym for effusion throughout the text. Semantics teaches us that this term describes active glandular production, which is certainly not the case in the majority of otitis media bouts identified. We cannot ignore that a proportion of these patients without doubt presented, at the time of examination, clinical status compatible with serous otitis media (the presence of a transudate filling the auditory fissure), some secretory otitis media (in this case, yes, secretion or exudate is applied with exactitude) and possibly some rare cases of false diagnosis due to residual mesenchyme. Our curiosity is awakened to learn the number of acute otitis media diagnoses made over the 4-year follow-up.

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Finally, I believe that the term “occurrence”, employed in the title, to a certain extent minimizes the importance of one of the rare good studies performed in our country with the objective of determining the incidence of this important and prevalent disease. As I stated, these comments are, in synthesis, constructive. The readers of the *Jornal de Pediatria* know that the construction of knowledge involves ideas and efforts; convictions are forged at the cost of opinions disagreements and, above all, cooperation.

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