Hubungan Kejadian Otitis Media Supuratif Kronik Tipe Aman Aktif dengan Refluks Laringofaring pada Anak: Kajian terhadap Pemeriksaan Saraf Autonom serta Instrumen Gejala dan Temuan Refluks = Relationship of Active Benign Type Chronic Suppurative Otitis Media and Laryngopharingeal Reflux in Children: a Study of Autonomic Nerve Dysfunction Assessment and Reflux Symptoms and Signs Instrument

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Abstrak

Otitis media supuratif kronik (OMSK) merupakan salah satu gangguan telinga yang sering menimpa anak dan dapat menyebabkan gangguan pendengaran dan penurunan kualitas hidup, serta banyak komplikasi. Kondisi yang terkait dengan OMSK di antaranya alergi, hipertrofi adenoid, dan refluks laringofaring (RLF). Refluks laringofaring pada anak belum banyak dipelajari di Indonesia, dan diagnosis RLF berdasarkan Instrumen Tanda dan Gejala Refluks belum banyak dipelajari. Kejadian RLF juga dikaitkan dengan gangguan saraf autonom, akibat gangguan nervus vagus yang dapat menyebabkan refluksat lambung naik ke nasofaring dan mencapai muara tuba.

Penelitian ini bertujuan untuk mengetahui hubungan RLF dengan OMSK tipe aman aktif yang dibahas desain 1 penelitian, yaitu studi kasus kontrol yang menganalisis alergi, hipertrofi adenoid, dan RLF sebagai faktor risiko OMSK tipe aman aktif. Desain kedua penelitian adalah studi kasus kontrol untuk mengetahui hubungan gangguan saraf autonom dengan kejadian RLF. Desain ketiga penelitian merupakan kohort retrospektif untuk mengetahui hubungan RLF dengan gangguan fungsi tuba. Penelitian dilaksanakan Mei 2023–Juni 2024, menyertakan 39 subjek OMSK tipe aman aktif dan 39 subjek kontrol dari pasien Poliklinik THT-KL RSCM, dan direkrut secara consecutive sampling. Subjek juga akan diperiksa kondisi RLF dan gangguan saraf autonom.

Hasil penelitian menunjukkan bahwa anak dengan RLF terbukti berisiko 5,59x lebih tinggi untuk terkena OMSK tipe aman aktif (OR: 5,59; 95%CI: 1,247–25,049; p = 0,025). Alergi (OR: 1,433; 95%CI: 0,343–5,981; p = 0,622) dan hipertrofi adenoid (OR: 1,178; 95%CI: 0,584–2,378; p = 0,646) tidak terbukti bermakna secara statistik sebagai faktor risiko OMSK tipe aman aktif. Gangguan saraf autonom juga belum terbukti secara statistik sebagai faktor risiko RLF (OR: 1,086; 95%CI: 0,444– 2,650; p = 0,856). Refluks laringofaring juga tidak terbukti menjadi faktor risiko gangguan fungsi tuba (RR: 1,558; 95%CI: 0,594–4,087; p = 0,367). Dapat disimpulkan bahwa RLF merupakan faktor risiko utama OMSK tipe aman aktif pada anak. Pepsin dan derajat keasaman dari refluksat RLF pada telinga tengah dapat berperan dalam kerusakan telinga tengah.

.....Chronic suppurative otitis media (CSOM) is a prevalent ear disorder in children that can lead to hearing impairment, a decline in quality of life, and various complications. Conditions associated with CSOM include allergy, adenoid hypertrophy, and laryngopharyngeal reflux (LPR). The incidence of LPR in children has not been extensively studied in Indonesia, and diagnosis of LPR based on Reflux Symptom and Sign Instrument is yet to be studied. LPR has also been linked to autonomic nervous system dysfunction, as disturbances in the vagus nerve can result in the reflux of gastric contents into the nasopharynx and the

opening of the Eustachian tube.

This study aims to investigate the relationship between LPR and active benign type CSOM with the first design being a case-control study that analyzes allergy, adenoid hypertrophy, and LPR as risk factors for active benign type CSOM. The second design, also a case-control study, is to determine the association between autonomic nervous system dysfunction and the occurrence of LPR. The third study design employs a retrospective cohort study to assess the relationship between LPR and Eustachian tube function disorders. The research is conducted from May 2023 to June 2024, including 39 subjects with active benign type CSOM and 39 control subjects from the ENT-HN Polyclinic of RSCM, recruited through consecutive sampling. Subjects will also be evaluated for the presence of LPR and autonomic nervous system dysfunction.

The results indicated that children with LPR were at a 5.59-fold increased risk of developing active safe type CSOM (OR: 5.59; 95% CI: 1.247–25.049; p = 0.025). Allergy (OR: 1.433; 95% CI: 0.343–5.981; p = 0.622) and adenoid hypertrophy (OR: 1.178; 95% CI: 0.584–2.378; p = 0.646) were not found to be statistically significant risk factors for active safe type CSOM. Additionally, autonomic nervous system dysfunction did not show statistical significance as a risk factor for LPR (OR: 1.086; 95% CI: 0.444–2.650; p = 0.856). LPR also did not appear to be a risk factor for Eustachian tube dysfunction (RR: 1.558; 95% CI: 0.594–4.087; p = 0.367). It can be concluded that LPR is a primary risk factor for active safe type CSOM in children. The presence of pepsin and the acidity level of the LPR refluxate in the middle ear may contribute to middle ear damage.