Adenoid hypertrophy is a common occurrence in pediatric otolaryngology, causing nasal obstruction, snoring, and mouth breathing. Complications may lead to impaired development in children. Reference test for adenoid hypertrophy is nasoendoscopy, but this specific tool can hardly be found in rural health facilities of archipelago countries. Alternatively, A/N ratio measurement on lateral neck radiography can be used to establish the confident diagnosis of adenoid hypertrophy.

An overweight 9 year-old boy came to our ENT clinic complaining stridor occurrence at night. He suffered stridor for the last year as he was gaining excessive weight. His mother reported that he was having trouble sleeping every night and was feeling sleepy during the day. The doctor suspected that this patient had obstructive sleep apnea (OSA) due to adenoid hypertrophy. To confirm the diagnosis, doctor offered to do endoscopy but the patient’s mother asked if there was any alternative diagnostic tool.

Three primary studies with good validities revealed that A/N ratio had sensitivity value of 17% – 41% and specificity value of 86% – 98%. High specificity indicated that A/N ratio measurement method is a decent tool to confirm the diagnosis in patients who were suspected of having adenoid hypertrophy. Therefore, this tool can be utilized as an alternative for nasoendoscopy to establish the diagnosis of adenoid hypertrophy, even though its diagnostic value would not be able to replace nasoendoscopy as a reference test.

In conclusion, A/N ratio measurement method can be easily applied by general practitioners or ENT specialists, especially those working in rural health facilities, where advanced equipment is rarely accessible, to confirm the diagnosis of adenoid hypertrophy.