

Pregnancy-Induced Rhinitis (PIR): Neglected Disease

Tomislav Baudoin¹, Tena Šimunjak²

¹Department of Otorhinolaryngology & Head and Neck Surgery, University Hospital Center Sestre Milosrdnice, ²Department of Otorhinolaryngology & Head and Neck Surgery, University Hospital Sveti Duh

Correspondence address: Tomislav Baudoin, tomislav.baudoin@gmail.com

Introduction: Pregnancy-induced rhinitis (PIR) is a widely present disease that manifests itself during pregnancy with complete resolution of symptoms after delivery.

Aim: In the ambidirectional longitudinal cohort study, the prevalence of PIR is evaluated as well as the appearance and character of its symptoms, and its impact on the quality of life.

Methods: Six hundred eighty-one (681) women completed questionnaires about nasal symptoms a day after delivery and each woman with nasal symptoms was interviewed 30 days later and data on symptom duration and quality were recorded.

Results: The prevalence of PIR was 31.86% (N=217), 47.14% (N=21) women had no nasal symptoms and 21% (N=143) of participants had prior sinonasal disease. The clinical presentation of pregnancy rhinitis included nasal obstruction as the most common symptom, followed by rhinorrhea, postnasal secretion, nose itching, sneezing, and hyposmia. The median duration of PIR was 4 months with their complete resolution of symptoms between the 2nd and 16th day after delivery in the majority of respondents. PIR was diagnosed significantly more often if the women carried a female child. PIR affected the quality of life during pregnancy in 53.9% women (N=117), with an average VAS score of 8. It seems that pregnancy may affect the course of previously present sinonasal disease (allergic rhinitis, chronic rhinosinusitis, nonallergic rhinitis, or non-infectious rhinitis prior to the pregnancy).

Conclusion: PIR is a common clinical entity but still neglected and insufficiently researched. We propose a definition of PIR. PIR is a non-allergic, non-infectious symptomatic inflammation of the nasal mucosa caused by a hormonal imbalance during pregnancy, lasting 6 or more weeks and resolving spontaneously within 4 weeks post-delivery, characterized with the presence of at least one nasal symptom (nasal obstruction, but also rhinorrhoea, nose itching, sneezing and/or hyposmia).

Keywords: pregnancy, rhinitis, quality of life