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A study of rhinitis among pregnant women in Tikrit city

ABSTRACT

Background: Pregnancy rhinitis is a relatively common condition, but it seldom discussed in the national literature. It gained importance in recent years, mainly due to the discovery of its association with snoring and obstructive sleep apnea during pregnancy. Additionally, studies have shown its association with gestational hypertension, intrauterine growth retardation and lower Apgar scores in neonates.

Objectives

-)] To identify the rhinitis in pregnant women according to age group
-)] To determine the various manifestations of rhinitis during pregnancy

Patients and methods: A cross-sectional study of 45 patients with symptoms of rhinitis during pregnancy. Some of them referred from the gynecological department and others seen directly in ENT private clinic during five months of study extending from September 2018 to February 2019.

Results: Half of the patients were less than the age of 34 years, the most frequent symptoms were nasal obstruction (67%) followed by rhinorrhea, sneezing and least reported post nasal drip (20%).

Conclusions: Rhinitis during pregnancy can affect any pregnant woman and symptoms emerging mostly in the first trimester.

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Introduction

Pregnancy rhinitis is a relatively common condition, but it is seldom discussed in the natinal literature. pregnancy rhinitis “as nasal congestion in the last six weeks or more weeks of pregnancy without other signs of respiratory tract infection with no known allergic cause. it gained importance in recent years, mainly due to the discovery of its association with snoring and obstructive sleep apnea during pregnancy(1). additionally studies have shown its association with gestational hypertension, intrauterine growth retardation and lower apager scores in neonates(1,2). despite its benign nature, it is one of the greatest bothering conditions affecting the quality of the life for pregnant women, especially the allergic rhinitis (3,4). it is also a major concern facing doctors for it is diagnosis and treatment(5,6). Rhinitis pregnancy is often underdiagnosed and yet being ignored in antenatal visit. the alterations of hormones through pregnancy especially estrogen, beside the rise blood volume are considered to be the principle cause of rhinitis pregnancy. (7)

Objectives

-) To identify the rhinitis in pregnant women according to age group

-) To determine the various manifestations of rhinitis during pregnancy
-) To categories rhinitis according to trimesters of pregnancy

Patients and methods

Acrossectional study with a sample of 45 patients with symptoms of rhinitis in pregnancy . some of them refered from gynecological department and other seen directly in ENT private clinic during the five months of study extend from the end of september 2018 to February 2019.

The data obtained from patients attending ENT clinic included (preexisting or newly appear nasalsymptom, onset, main symptoms and enviromental factors) All patients were fully examined for nose ,ear and throat , in addition nasal endoscopy by zero and thrity degree.

Result

Table 1 shows distrubation of pregnancy rhinitis patients according to age. More than half of patients were less than age of 34 years

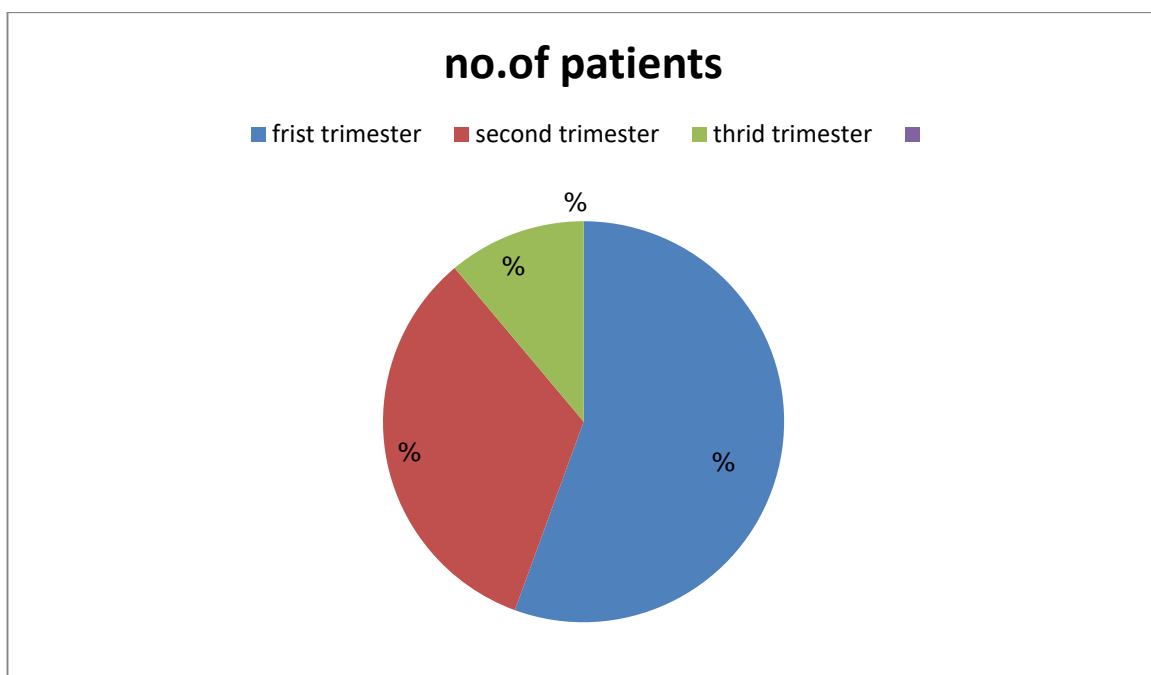
Table 1 : Distribution of apntients with rhinitis according to age

Age (years)	No. of patients	Percentage
20-24	17	37.7%
25-29	8	17.7%
30-34	10	22.2%
35-39	6	13.3%
+40	4	8.8%

Table 2 shows symptoms of rhinitis the most frquent symptoms were nasal obstruction 30(67%) followed by rhinorrhea,sneezing and least reportedsymptom post nasal drip 9(20%)

symptoms	NO. andpercentage
Nasal obstruction	30 67%
Rhinorrhea	24 55%
Sneezing	17 39%
Post nasal drip	9 20%
Others(cough,itching)	8 18%

Figure 1:distribution of patients according to trimesters



Discussion

According to our knowledge, this study was the first reported in our country which identified the pregnancy rhinitis. Surprisingly, in many countries the incidence of pregnant rhinitis remains understudied.

The rhinitis in pregnancy remains unclear. It may be caused by numerous substances and hormones secreted during

pregnancy (estrogen, progesterone and others). These lead to changes in the nasal mucosa in the form of increased activity of serous mucus gland and increased vascularity or due to aggravation of underlying existing condition prior to pregnancy.

Several studies have addressed certain associations between demographic features and pregnancy rhinitis such as age and living area. (7) Similarity in the age group distribution with pregnancy rhinitis shows some differences in our study (7).

Rhinitis in pregnancy can develop any time in pregnancy (8,9). In our study, majority developed in the first trimester. These results were comparable to the West Pomerania study (10). This may be explained by increased blood volume and hormonal alteration which are typically noticed in the first two trimesters (11,12).

We suggested that symptoms of rhinitis in pregnancy should be taken into consideration in the pregnancy follow-up and advice for further studies in different

regions in Iraq with large population. Study with more emphasis on the risk factor, clinical history and investigation.

Conclusions

-Rhinitis in pregnancy can affect any age during pregnancy and symptoms emerge mostly in the first trimester.

-Nasal obstruction and rhinorrhea were the most common manifestations.

Recommendations

1-symptoms of pregnancy rhinitis should be taken into consideration in pregnancy follow-up.

2-further studies with more emphasis on the pregnancy rhinitis investigation and clinical symptoms in relation to pregnancy outcome and newborn Apgar score.

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