Prevalence of Restless Leg Syndrome in Pregnant Females

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ABSTRACT

Background: About 10% of the general population was affected by Restlessness leg syndrome (RLS). This is commonest in pregnant women. We implement the phenomenon in Pakistani population to evaluate the prevalence in local women population, due to the fact that the anemia and iron paucity is more communal in our population. The primary objective of the study was to determine the prevalence of RLS in pregnant females.

Methods: This was a descriptive observational cross sectional study where a total of 80 females participated. The exclusion criteria includes woman with chronic heart or kidney disease whereas all pregnant women irrespective of their pregnancy stage in between 18 to 45 years of age were included in this study. All the participants were interviewed via well-defined pre tested questionnaire. IRLS Standard scale (International RLS study group rating scale) was used for severity of RLS.

Results: The mean age of women was 28.2+5.4. 54(67.5%) of the women were aged 18-30 whereas 26(32.5%) women were belonging to age 31-45 years. 48 (60%) of females were with primigravida pregnancy and 20(40%) were multigravida. The prevalence of the RLS is 22.5%.

Conclusion: the RLS appears frequently during pregnancy in women and a large number possess sever or very sever symptoms in local population.

Key words: Pregnancy, Restlessness leg syndrome (RLS), risk factors, anemia, Prevalence

INTRODUCTION

To an estimate about 10% of the general population was affected by Restlessness leg syndrome (RLS). This is commonest in pregnant women. [1] It is three times huger in pregnancy than the general population. The severity of RLS is also high during this period[2,3,4]. Thus we may designate the pregnancy as important risk factor. In published reports the prevalence of RLS among pregnant women ranges from 20-26%[5,6,7]. Lately it has been observed that the condition of anemia is prompting risk factor for RLS in pregnant women[4,5,6,7]. We implement the phenomenon in Pakistani population to evaluate the prevalence in local women population, due to the fact that the anemia and iron paucity is more communal in our population[8]. The primary objective of the study was to determine the prevalence of RLS in pregnant females.

MATERIAL AND METHODS

This was a descriptive observational cross sectional study where a total of 80 females participated. The venue of the study was Mayo hospital (Lady Aitcheson Hospital) Lahore. These females were recruited through out patient department (OPD) as well as from the wards also. The study duration was

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of six months starting from january 2017 .The exclusion criteria includes woman with chronic heart or kidney disease whereas all pregnant women irrespective of their pregnancy stage in between 18 to 45 years of age were included in this study. All the participants were interviewed via well-defined pre tested questionnaire. This questionnaire contained question about demographic and clinical information of women. An informed consent was taken from all participants before joining the study also an ethical approval was taken from hospital ethical committee. All the demographic, socioeconomic and clinical investigations were stored electronically for further analysis. The frequently observed confounding signs or symptoms were provided with special attention. IRLS Standard scale (International RLS study group rating scale) was used for severity of RLS.

Statistical analysis: All the collected data was stored electronically & analyzed later by using SPSS version 18. Descriptive statistics were applied to calculate mean and standard deviation. Frequency distribution and percentages were calculated for qualitative variables like pregnancy stage, RLS severity level. Over all a P values less than 0.05 was considered statistically significant.

RESULTS

This study contains a total of 80 pregnant women. The mean age of women was 28.2+5.4. 54(67.5%) of the women were aged 18-30 whereas 26(32.5%) women were belonging to age 31-45 years. 48(60%)

of females were with primigravida pregnancy and 20(40%) were multigravida. The demographics of the participants were given in table 1.

Table 1: Summary of demographics

Demographic	n (%)
Age	
Mean age	28.2 ± 5.4
18-30	54 (67.5%)
31-45	26 (32.5%)
Education level	
Below Primary	21(26.25%)
Primary to matriculation	40 (50%)
Above Matric	19 (23.75)
Socioeconomic status	
Low	48 (60%)
Middle	20 (25%)
High	12 (15%)
Smoking	
Yes	24 (30%)
No	56 (70%)
Medication	
Yes	28 (35%)
No	52 (65%)

Out of total pregnant women 18 were diagnosed with RLS. The prevalence of the RLS is 22.5%. We observed 8.7% the prevalence in first trimester, 55% in second and in third the prevalence was 36.3%. The severity of RLS is given in figure 1.

Fig. 1: Detail of severity levels of RLS.
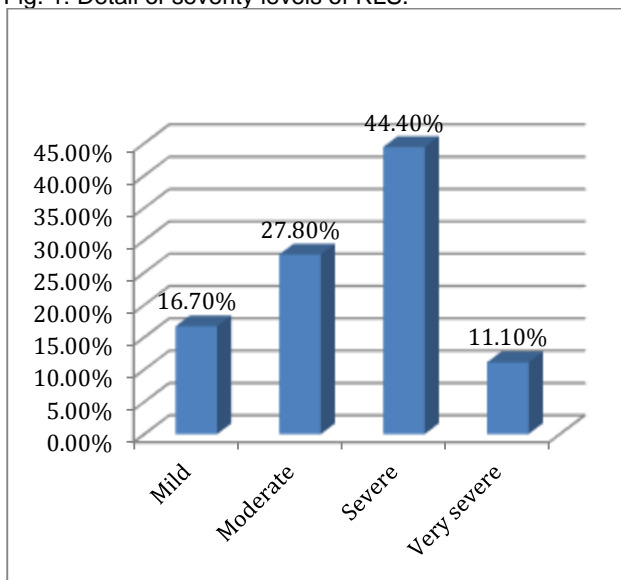
DISCUSSION

The study was the conducted to determine the prevalence of RLS among pregnant women in Lahore, Punjab District; this was also the first study of its kind to estimate the number of cases with RLS diagnosis among women with pregnancy through a face-to-face interview. For the first time in local population the IRLS scale was used to measure the severity of RLS among pregnant women during pregnancy. Our study reported the overall prevalence of RLS in pregnant women was 22.5%, which was quite high as compared to other studies. [9] The highest RLS was reported in the second and third trimester of pregnancy. Most of the RLS cases were reported Sever through IRLS scores, which was almost 45%. The study results or finding are similar to the finding of Manconie et al[6]. The study approach used in the earlier mentioned study was also face-to-face interview[10]. The high prevalence may be associated to the recall bias as of when the women answer related to the sporadic symptoms[11,12]. This may be possible for women to valuate high to other sever symptoms like postural revision during slumber. Lumbar-pelvic and sciatic pain can be resulted due to above stated phenomenon[13-16]. Among women the high RLS prevalence was suggestively explained by parity[17] and pregnancy. [18] Our study may not be able to report any difference between multigravida and primigravida, as we did not detect any significant difference. This finding is similar to Manconi et al[6]. Once the pregnancy ended, different attempts were made to explain the high prevalence of RLS and this is quit argumented debate, one possible argument is the iron theories; this may be well fitted as an justification[19-22]. The use of IRLS[23] scale for estimation of severity of RLS was Lesley reported during pregnancy in previous published studies. Our study report large number of women with severs RLS scores during pregnancy. We may suggest using this Scale on wider range as to before and after pregnancy as well. This may require a wider sample size and resources.

CONCLUSION

We may conclude that the RLS appears frequently during pregnancy in women and a large number possess sever or very sever symptoms in local population.

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