Summary And Conclusions

Bacterial vaginosis is considered one of the most common alteration of the vaginal ecosystem in women of the reproductive age. It is a polymicrobial condition characterized by depletion of vaginal lactobacilli accompanied by overgrowth of mixed vaginal flora.

B.V. is considered one of the main causes of increased vaginal discharge occurring in women attending obstetrical and gynecological clinics.

Patients always present with malodorous vaginal discharge although 50% asymptomatic.

Bacterial vaginosis is characterized by the presence of at least 3 of 4 clinical criteria of:

1- Homogenous malodorous vaginal discharge.

2- Vaginal PH > 4.5.

3- Fishy odor on addition of KOH 10% to vaginal discharge.

4- Presence of clue cells on wet mount.

Bacterial vaginosis is not considered a serious disease by itself, but it appears to be a risk factor for the occurrence of many complications including upper genital tract infections, postoperative infection and cervical intraepithelial neoplasia and obstetric complications preterm labour, abortion and PROM.

Preterm labour is the onset of regular uterine contraction associated with progressive CX dilatation between viability and 37 completed weeks of gestation.

Spontaneous preterm labour before 37 week account for 10% of all birth and 75% of neonatal death.

The aim of the present study was to assess effect of B.V. in preterm labour.

It included 100 women divided into 2 groups:

Group A: 50 women with spontinous preterm labour.

Group B: 50 women in full term labour.

For each women a full history, general and local examination were done and clinical diagnosis was obtained by the presence of 3 out of 4 clinical criteria. Also laboratory confirmation by Gram-stained vaginal smear.

The results of Gram-stain diagnosis were classified either to normal women with score (0-3), intermediate women with score (4-6) and B.V. women with score (7-10).

In preterm group 33pt out of 50 pt had B.V (66%) while in full term group 24 pt out of 50 pt had B.V (48%) so the incidence of B.V in our study is significantly more in preterm group than full term group

Symptom of B.V including fishy odour, itching and may be dysureia. In preterm group only 23 patient out of 33 cases with B.V complained of symptoms of B.V representing 69.7% while in full term group only 9 patient out of 24 case with B.V complained of symptoms of B.V.

By using the Nugent score ***(Nugent et al., 1991)*** new scoring system (0-10)for Gram stained vaginal smears , the 50 women of (preterm group) were divided into 14 normal women (28%) with a score between (0-3) 3 women (6%) with intermediate score between (4-6) and

33 women having bacterial vignosis (66%) with a score between (7-10) while in 50 women of (full term group) 20 women (40%) were normal, 6 women (12%) were intermediate, and 24 women (48%) having bacterial vignosis. So the prevalence of B.V in our study 66% in preterm group and 48% in full term group

In preterm group all 4 criteria were found in 12 patient out of 33, (vaginal PH > 4.5, thin discharge and fishy odour) were found in 3 patient only, (PH > 4.5 fishy, odour and clue cell) were found in 12 patient and (pH > 4.5, thin discharge clue cell) were found in 6 patient.

In full term group all 4 criteria were found in 10 patient, (pH > 4.5, thin discharge and fishy odour) were positive in 2 patient (pH > 4.5, fishy odour and clue cell) were positive in 8 patient and (pH > 4.5, vaginal discharge and clue cell) were positive in 4 patient

The most objective method of detecting clue cells is to observe the epithelial cells border which is relatively obscured by bacteria, the presence of clue cells on wet mount examination is single most reliable indicator of B.V with a sensitivity 97%, 94.5% and specificity 96%, 93% in preterm and full term group respectively

The incidence of pt who had B.V and complain from preterm labour is more in early G.A preterm labour in G.A $\geq$ 20 week – 24 week (75%), 25 week – 28 week (42%), 29 week - 32 week (37%) and 33 week - $\leq$ 37 week (30%) this was not statistically confirmed because of small No. of cases

From this study, it was found that the clue cells in wet mount are the most sensitive and specific criteria among 4 Amsel criteria. Also, the microscopic examination of Gram-stained vaginal smears should be considered the gold standard for the diagnosis of bacterial vaginosis because the clinical signs are subjective and affected by many factors not

related to infection. However, still the 4 clinical criteria are excellent tools for guiding the diagnosis of B.V.

It was concluded that bacterial vaginosis is considered as one of the most common vaginal infection in pregnancy and it have role in preterm labour.