

## **Isolation of *Gardnerella Vaginalis* from Pregnant Women with Bacterial Vaginosis in Basrah, Iraq**

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**Objective:** To determine the prevalence of *Gardnerella vaginalis* among pregnant women and to examine the efficiency of clinical diagnosis compared to laboratory methods.

**Methods:** Clinical and laboratory study was designed using at least three out of four clinical signs (Homogeneous vaginal discharge, vaginal pH more than 4.5, positive amine test and the presence of clue cells) in the diagnosis of bacterial vaginosis. This was then compared to *Gardnerella vaginalis* isolation.

**Setting:** Basrah University Maternity Hospital.

**Subjects:** Pregnant women attending the maternity hospital for their periodic visits during the period from April 1995 to September 1997.

**Results:** Out of 413 vaginal swabs examined, *Gardnerella vaginalis* was isolated from 32 (7.7%) and by the use of clinical criteria as diagnostic procedure, the prevalence of bacterial vaginosis was found to be 7%. In cases where *Gardnerella vaginalis* was isolated, 93.1% of women had vaginal pH greater than 4.5 as compared to those with no *Gardnerella vaginalis* where only 10.2% had greater than 4.5. All women with positive cultures had positive amine test (100%). Clue cells were a constant finding in the discharge of pregnant women with positive *Gardnerella vaginalis* cultures.

**Conclusion:** Amine test alone or together with estimation of vaginal pH are the most suitable tests for prediction of bacterial vaginosis as it has an excellent sensitivity (100%) and specificity (97.9%). The clinical signs are simple to assess and highly related to the isolation of *Gardnerella vaginalis* (87.5%). This is in contrast to clinical symptoms which do not correlate well as more than half of *Gardnerella vaginalis* colonized pregnant women were asymptomatic.