

collected from each woman at cycle day 12.

The blood was delivered into a sterile screw plastic tube, and then centrifuged at 3000 RPM for 5 minutes the serum was then collected into another sterile tube and was kept in deep freeze at -20°C for estimation of estrogen level.

Swabs Collection

Three sterile cotton tipped swabs were used to collect vaginal discharge from the posterior fornix^(32,34,35). Two swabs were used for cultivation. One blood agar and chocolate agar were incubated anaerobically at 37°C. The second blood agar MacConkey's and Sabouraud's agar were incubated

aerobically at 37°C for 72 hour. The third swab was used for the preparation of Gram's stain, Whiff test and KOH preparation by rolling this swab on two clean glass slides first smear was mixed with a drop of 10% KOH for Whiff test then examine for detection of Candida organisms and the second smear was fixed by heat and then stained according to the Gram's stain procedure⁽²¹⁾.

Estrogen (E₂) assay

Estrogen level of the frozen serum of infertile women was estimated by VIDAS Estradiol 11 (E₂ 11) kit-from biomerieux sa-France.

Table 1: show the ranges of expected normal values of E₂ (from biomeriex Sa).

Normal subjected female	E ₂ range, pg/mL
- Follicular phase	18 – 147
- Pre-ovulatory peak	93 – 575
- Luteal phase	43 – 214
- Menopause	< 58

Note:

E₂ 11 is an automated quantitative test for use on the VIDAS instruments for the quantitative measurement of 17β estradiol in human serum or plasma (lithium heparinate), using the (ELFA) technique.

Statistical methods

The Statistical methods that were used in study to analysis the results of this study include Chi-square test and ANOVA test

Result

Vaginal pH as predictor for candidiasis and bacterial vaginosis in infertile women

The results of vaginal pH testing in both patients and control groups are shown in table (2), which showed highly significant (P<0.001) relationship

between B.V and vaginal pH when compared to the control group 45/48 (93.75%) of infertile women who had B.V were found to have vaginal pH equal or above 4.5 versus 31/37 (83.8%) of healthy control group had vaginal pH less than 4.5. While no significant relationship between high vaginal pH and candidial infection compared to the control group, however 18/24 (75%) of infertile women with candidial infection had vaginal pH less than 4.5.