بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

ASSESSMENT OF THE AMINE TEST COMPARED WITH GRAM STAIN IN THE DIAGNOSIS OF BACTERIAL VAGINOSIS

Thesis
submitted to the Faculty of Medicine,
University of Alexandria,
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INTRODUCTION

ANATOMY OF THE VAGINA

The vagina is a tubular, musculomembranous structure that extends from the vulva to the uterus, interposed anteriorly and posteriorly between the urinary bladder and the rectum. This organ has many functions ; the excretory canal of the uterus, through which uterine secretions and menstrual flow escape, the female organ of copulation, and a part of the birth canal. Embryologically the upper portion of the vagina arises from the Mullerian ducts while the lower portion is formed from the urogenital sinus. Anteriorly, the vagina is in contact with the bladder and urethra, from which it is separated by connective tissue, often referred to as the vesicovaginal septum. Posteriorly, between the lower portion of the vagina and the rectum, there are similar tissue that, together, form the rectovaginal septum. Usually, the upper fourth of the vagina is separated from the rectum by the rectouterine pouch, also called the cul-de-sac of Douglas.[1]

The upper end of the vaginal vault is subdivided into the anterior, posterior, and two lateral fornices by the uterine cervix. Because the vagina is attached higher up on the posterior wall than on the anterior wall of the

cervix, the depth of the posterior fornix is appreciably greater than the anterior. The lateral fornices are intermediate in depth. Vaginal length varies considerably; the anterior and posterior vaginal walls are, respectively, 6 to 8 cm, and 7 to 10 cm in length.[1]

The vaginal skin is comprised of non-cornified stratified squamous epithelium. Beneath the epithelium there is a thin fibromuscular coat, usually consisting of an inner circular layer and an outer longitudinal layer of smooth muscle. There is a thin layer of connective tissue that overlies the mucosa and the muscularis, one that is rich in blood vessels, and one in which there are a few small lymphoid nodules. The mucosa and muscularis are attached very loosely to the underlying connective tissue. Some argument remains as to whether this connective tissue, often referred to as perivaginal endopelvic fascia, is a definite fascial plane in the strict anatomical sense.[1]

From early in infancy until after menopause, there is a considerable amount of glycogen in the superficial cells of the vaginal mucosa. By examination of cells that are exfoliated form the vaginal epithelium, one can identify the various hormonal events of the ovarian cycle.[1]

In nonpregnant women, the vagina is kept moist by a small amount of secretion form the uterus. During pregnancy, there is copious, acidic vaginal secretion, which normally consists of a curdlike product of exfoliated

epithelium and bacteria. *Lactobacillus* species are recovered from most pregnant women in higher concentrations than in nonpregnant women. These are the predominant bacteria of the vagina during pregnancy. The acidic reaction is attributable to the presence of lactic acid, which arises from the metabolism of glycogen from the mucosal cells by lactobacilli. The pH of the vaginal secretion varies with the nature of the ovarian hormones that are secreted. Before puberty, the pH of the secretions of the vagina varies between 6.8 and 7.2, whereas in adult women it generally ranges from 4.0 to 5.0.[1]

There is an abundant vascular supply to the vagina; the upper third is supplied by the cervicovaginal branches of the uterine arteries, the middle third by the inferior vesical arteries, and the lower third by the middle rectal and internal pudendal arteries. The vaginal artery may branch directly from the internal iliac artery. There is an extensive venous plexus that immediately surrounds the vagina, vessels that follow the course of the arteries; eventually, these veins empty into the internal iliac veins. For the most part, the lymphatics from the lower third of the vagina, along with those of the vulva, drain into the inguinal lymph nodes; those from the middle third drain into the internal iliac nodes; and those from the upper third drain into the iliac nodes.[1]

AETIOLOGY OF BACTERIAL VAGINOSIS

History of bacterial vaginosis :

Nomenclature :

In 1954 Gardner and Dukes described a distinct clinical entity which presented as an increased often foul smelling vaginal discharge that was not associated with any recognized pathogen. They named this condition "*Nonspecific vaginitis*" in order to distinguish it from other causes of vaginitis such as *Trichomonas vaginalis* and *Candida* species. The isolation of *Haemophilus vaginalis* - subsequently named as *Corynebacterium vaginale* and now known as *Gardnerella vaginalis* - from these patients, caused Gardner and Dukes to change the name to *Haemophilus vaginalis* vaginitis. This term, later modified to *Gardnerella*-associated vaginitis, was used by many workers until it became clear that anaerobes were also present in this condition and the term anaerobic vaginitis or vaginosis was favoured. In 1984 a working group reached a consensus that it would be more appropriate to call this condition "bacterial vaginosis", "bacterial" because of its association with many bacteria and "vaginosis" because of the lack of an inflammatory response. Recently, vaginal bacteriosis has been suggested as a more correct name but bacterial vaginosis remains the most widely used and accepted term.[2]