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Editorial Open Access

Bacterial Vaginosis

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International Scenario of Bacterial Vaginosis

Bacterial vaginosis (BV) is a common vaginal disorder in woman in child bearing age associated with adverse outcomes including preterm birth and acquisition of sexually transmitted diseases and pelvic inflammatory disease. This condition is highly unfavorable and causes severe complications related to reproductive system of women. According to literature reports, it has affected 10%-20% of Caucasian women and 30%-50% of African-American women [1-4]. It has also found its prevalence in US where 29.2% women were reported with vaginal symptoms including 51.4% non-Hispanic blacks, 31.9% among Mexican Americans, and 23.2% among non-Hispanic whites [5]. Its prevalence is 14.6% in Thai [6]. BV was also reported among woman with vaginal symptoms in Rwanda as showed by Gram stain examination. Further insight into the pathology in other BV affected Rwandan women populations is needed to give a clear picture [7]. Epidemiological studies indicate that there is a risk of BV in women of African ethnicity [8-10].

Indian Scenario of BV

In 2007, a population based prevalence survey of BV was conducted among women in Delhi, India by Bhalla and coworkers. A high percentage though asymptomatic (31.2%) were found to have BV infections. Highest prevalence was seen in urban slum followed by rural and urban middle class community which was more likely to acquire other STIs [11]. Madhivanan and others (2008) conducted a survey in Mysore, India and determined 43.5% prevalence and correlation of BV among young women of reproductive age [12]. Patients were diagnosed with endogenous reproductive tract infection in which 17.4 % with sexually transmitted infection and 19.1 % were found to have BV.

Pathologic Outcomes of BV

The disease is associated with severe gynecologic complications, such as cervicitis, salpingitis, endometritis, post-operative infections, pelvic inflammatory disease, oophoritis with or without tubo-ovarian abscess and obstetric complications, such as premature rupture of the membranes, preterm deliveries, chorioamniotitis and postpartum endometritis. The endotoxins produced by *G. vaginalis* make some women more susceptible to the production of cytokines and prostaglandins that may trigger labor [13,14]. A series of gynaecological and obstretric complications found to be associated with BV, are outlined in Table 1.

Pathology in women		**References**
Gynecological consequences in BV diseased women		
	postpartum endometritis	[15]
	post-abortion endometritis	[16]
	the production of HIV by HIV infected monocytoid cells certain T cells (77-fold)	[17]
	pelvic infection following gynecologic surgery	[18]
	A disturbed vaginal ecology more permissive environment for acquiring HIV	[19]
	A high concentration of lipopolysaccharides (LPS) was found in the vaginas of women with BV	[20,21]
Pathology in neonates		
Long-term neurological consequences in neonates, such as		
	hyperactivity	[22]
	academic difficulties in school	
	severe handicaps such as cerebral palsy	[23]
	preventricular leukomalacia	[24]
	damage in the dopaminenergic system in neonates	

	brain injury to fetuses is caused due to ability of G. vaginalis and toxins produced by them to cross placenta	[25]
Pathology in men		
	urethral discharge and inflammation of the glans penis	[26]
	urethritis	
	balanoposthitis	[27]
	ascending urinary tract infection	[28]

Table 1: Gynecological and obstetric complications associated with BV.

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