BLUE NEVUS OF THE UTERINE CERVIX

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Introduction

Uterine cervix is an unusual location for pigmented melanocytic lesions. Although blue nevus and malignant melanoma are relatively more common, occasional reports of benign lentigo and melanosis are also found in the world literature [1].

Blue nevus is an uncommon pigmented lesion of the dermal melanocytes. It can appear in diverse forms : dendritic, spindle-shaped, oval or polyhedral. Although it usually occurs in the skin, it has been reported in other locations viz. oral mucosa, sclera, uterine cervix, vagina, prostate, spermatic cord, pulmonary hilus, orbit, conjunctiva, maxillary sinus, breast lymph nodes [2].

Case Report

A 38 year old lady presented with complaints of irregular cycles and excessive bleeding during menstruation for past two years. She denied any previous history of hormonal medication or any surgical intervention.

The patient was subjected to Total Abdominal Hysterectomy and the specimen sent for histopathological examination. Gross examination and light microscopy of the uterine corpus revealed multiple intramural leiomyoma. Cervix was unremarkable on gross examination. Light microscopy displayed presence of benign melanocytes and melanophages in the stroma of the endocervix and ectocervix. These cells stained positive by Masson's Fontana stains; negative by Perl's stain; positive for hydrogen peroxide bleach and positive for S-100 protein by immunohistochemistry (Fig 1&2).

Discussion

Blue nevi are rare incidental findings seen in the cervix of hysterectomy specimen from middle-aged women. The lesion is seldom detected clinically or colposcopically. However, it appears in most instances as a blue-black lesion in the posterior wall of the endocervix on gross pathologic examination. The demonstration of S-100 protein by immunohistochemistry, alongwith ultrastructural observations, support combined melanocytic and schwannian differentiation

of the blue nevus cells. Ultrastructurally they contain melanosomes, which are surrounded by a basement membrane, and display occasional desmosome-like devices [3,4].

One Japanese worker, Uehara et al [5] has described this extracutaneous blue nevus as "Foci of Stromal Melanocytes" (FSM). However, macroscopic and histological findings suggest that FSM of the cer-

Fig. 1 : Endocervical epithelium with melanin containing cells

Fig. 2 : Blue nevus of the endocervix - melanin containing cells

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vix are more analogous to dermal melanocytosis, rather than to cutaneous blue nevus and so are more appropriately termed as stromal melanocytosis.

Pigmented lesions of the cervix have been a rarity. Of the first few cases noted in literature have been that of Bland-Sutton in 1922, who also made reference to a similar observation by Barnes in 1883 [6]. Both were noted in black women with uterine prolapse. The first histologically examined case was reported by Babes et al in 1923 [7].

The other pigmented lesions in the cervix are lentigo, lentigo with blue nevus, melanosis, primary melanoma of the cervix, malignant acanthosis nigricans and a case of melanosis of the vagina extending into the cervix. The spectrum of pigmented lesions in the vagina is more of melanosis and melanomas as compared to blue nevus [1,8].

The origin of pigmented melanocytes in the cervix has been summarised by Vezzani and Sola et al [9]. The relevant theories include : 1) erratic migration of the neural crest elements, with melanocytes being part of choriostomas; 2) migration of melanocytes from adjacent mucocutaneous areas; 3) appearance of melanocytes as part of epidermidisation of cervical epithelium as a result of local pathological process like chronic irritation, uterine prolapse or cryotherapy.

Irrespective of the theory of origin, all pigmented lesions of the cervix identified on colposcopy, should be subjected to histopathological evaluation, to rule

out malignancy. Since the biological behaviour of melanosis is unpredictable, it is essential that all such cases identified on colposcopic biopsy or on routine biopsy should be subjected to regular follow-up.

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