BACILLARY ANGIOMATOSIS
In an immunocompetent patient.
The first case reported in the gulf area.

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Abstract:

Bacillary angiomatosis (BA) is an unusual systemic vascular proliferation seen predominantly in patients with acquired immunodeficiency syndrome. It is a newly recognized disease. The vascular lesions are probably duo to infection with a Bartonella henselae, gram negative bacilli which can be demonstrated in tissue sections with Warthin-Starry stain and electron microscopy.

(BA) clinically is most often a papulo-nodular lesions resembling angioma, pyogenic granuloma and Kaposiís sarcoma. The disease is usually response well to antibiotic therapy.

We are reporting a case of Bacillary angiomatosis in a healthy patient without HIV infection as an additional case of such a very rare disease. The clinical, histologic manifestations are discussed with review of the literature.

Case Report:

A 28 - year - old single heterosexual man presented with a unilateral, numerous, asymptomatic, red to purple papulo-nodular lesions affecting the hand, arm, forearm, axilla, shoulder and upper chest of the right side of the body of four months duration. The lesions ranged in size from pinpoint to large nodules. Few were nippleñlike with central umbilication while few other lesions resembled pyogenic granuloma (Fig.1,2&3). Subcutaneous nodules were also present at the dorsum of the right hand. Post-inflammatory hyperpigmented macules were scattered between the lesions at sites of previous ones that resolved spontaneously (Fig. 4).

Physical examination of other organs and systems revealed no remarkable findings.

Test for human immunodeficiency virus (HIV) was negative.

Liver function tests were within normal limits. Levels of CD3 , CD4 and CD8 circulating cells and CD4/CD8 ratio were within normal range. A punch biopsy specimen was taken from two different sites of the right arm for histopathological study and were reported to show rounded lobular capillary proliferations(Fig.5). Marked endothelial cells, neutrophil and other inflammatory cells were present, as well as granular deposits adjacent to the capillaries that may reveal bacteria(Fig.6&7). Warthin-Starry stain failed to demonstrate the bacilli.

The diagnosis of BCILLARY ANGIOMATOSIS was concluded on clinical and histopathologic basis.

Erythromycin, two gram/daily for twenty-one days lead to resolution of the papulo-nodular lesions. Two big nodules that persisted were removed surgically. The patient is currently followed up for any further developments.

Discussion:

Bacillary angiomatosis is a newly recognized disease most often characterized by a cutaneous reddish papules and nodules of vascular origin[1]. These vascular lesions are probably due to infection with a Bartonella henselae, gram negative bacilli[2]. Bacillary angiomatosis may involve either the skin, visceral organs or both. The skin lesions may be

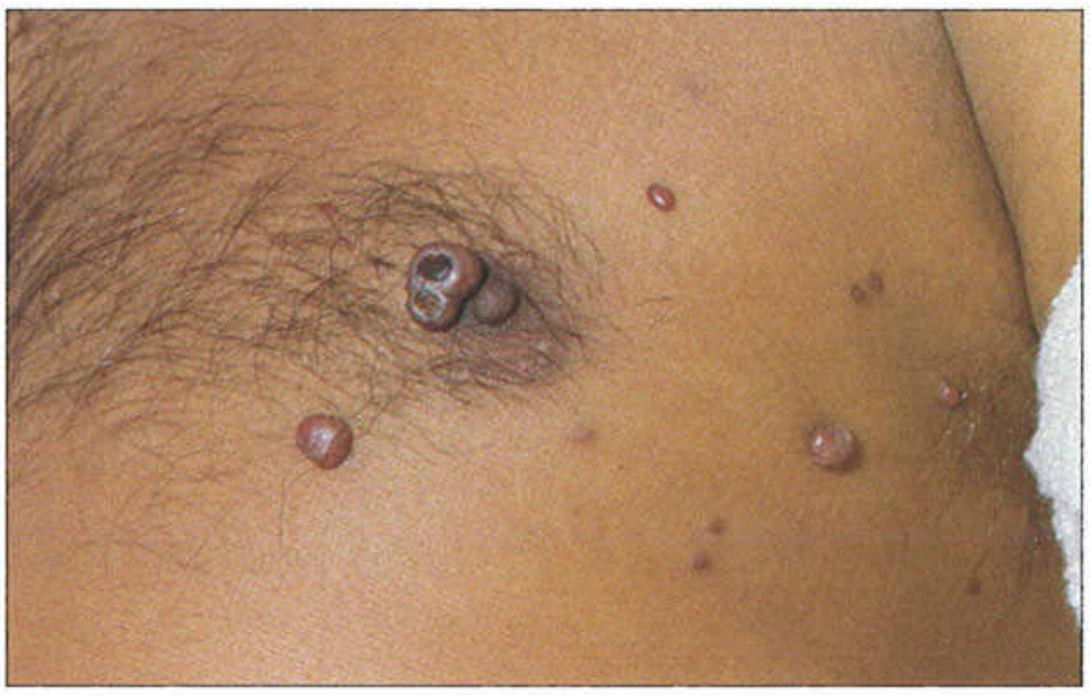

Fig. (1) : Nipple-like lesions with central umbilications.

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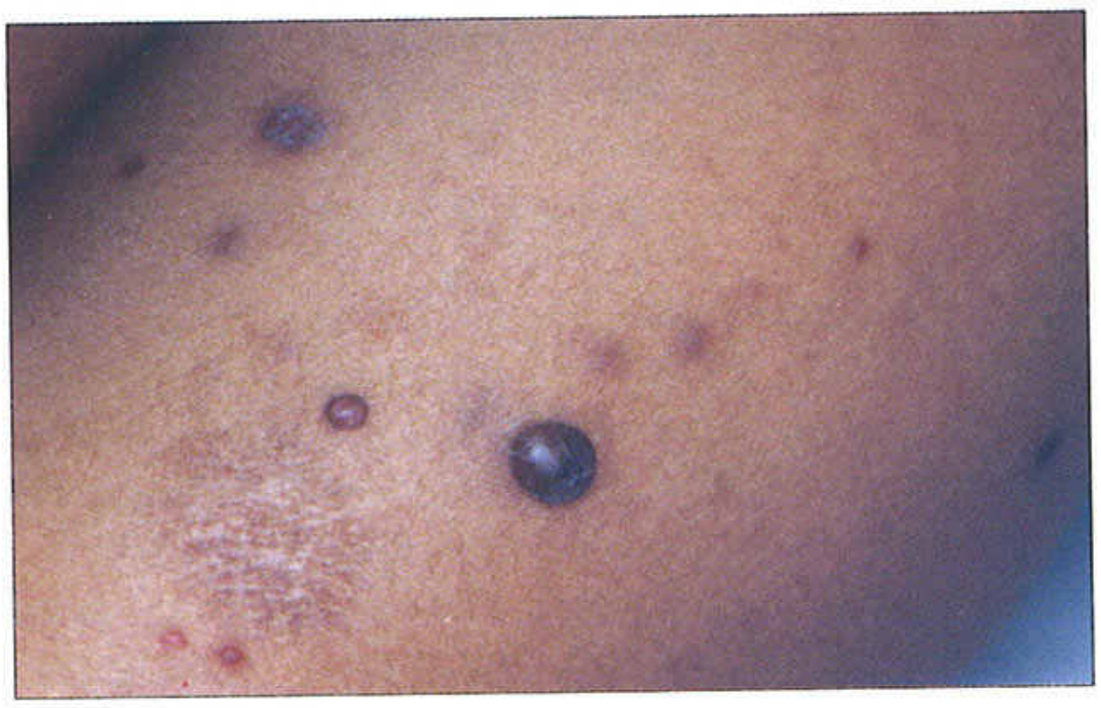


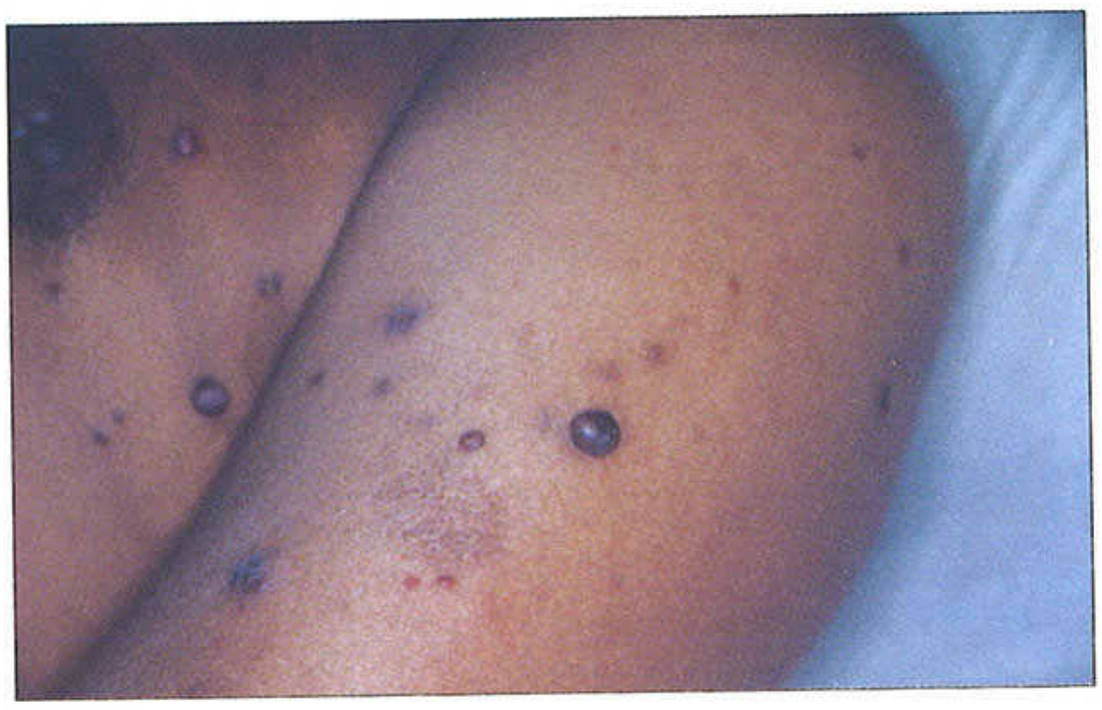


Fig. (2&3): Nodules resembling angioma and pyogenic Granuloma.

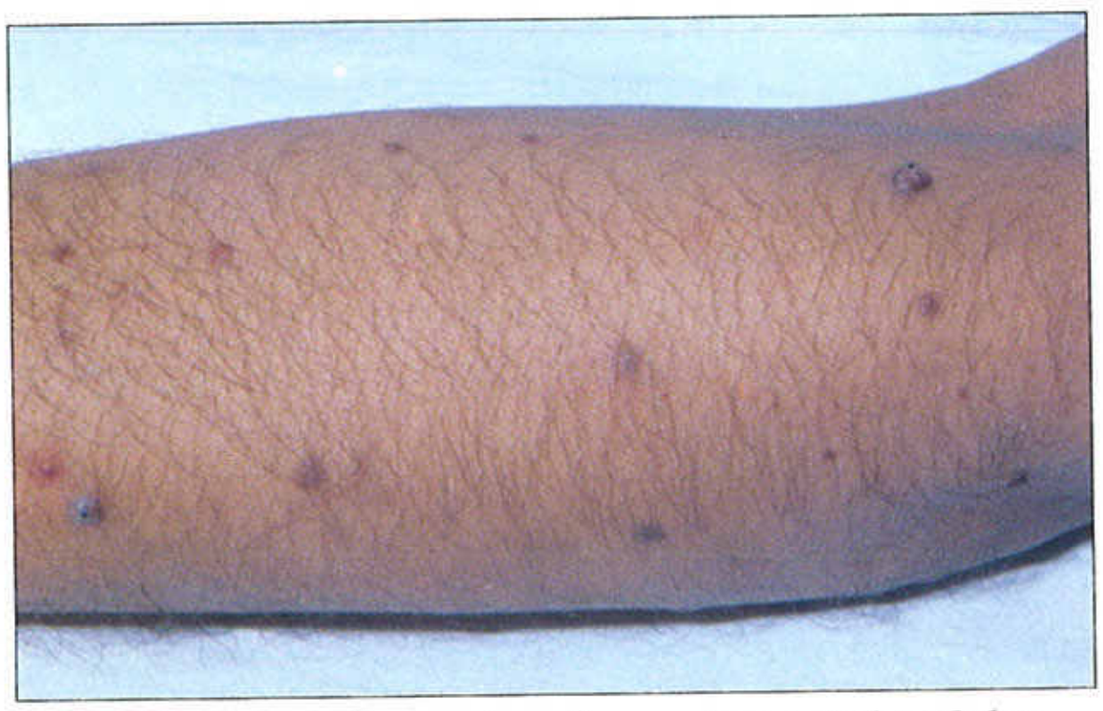


Fig. (4) : Post-inflammatory hyperpigmented nodules between the popular lesions of (BA).

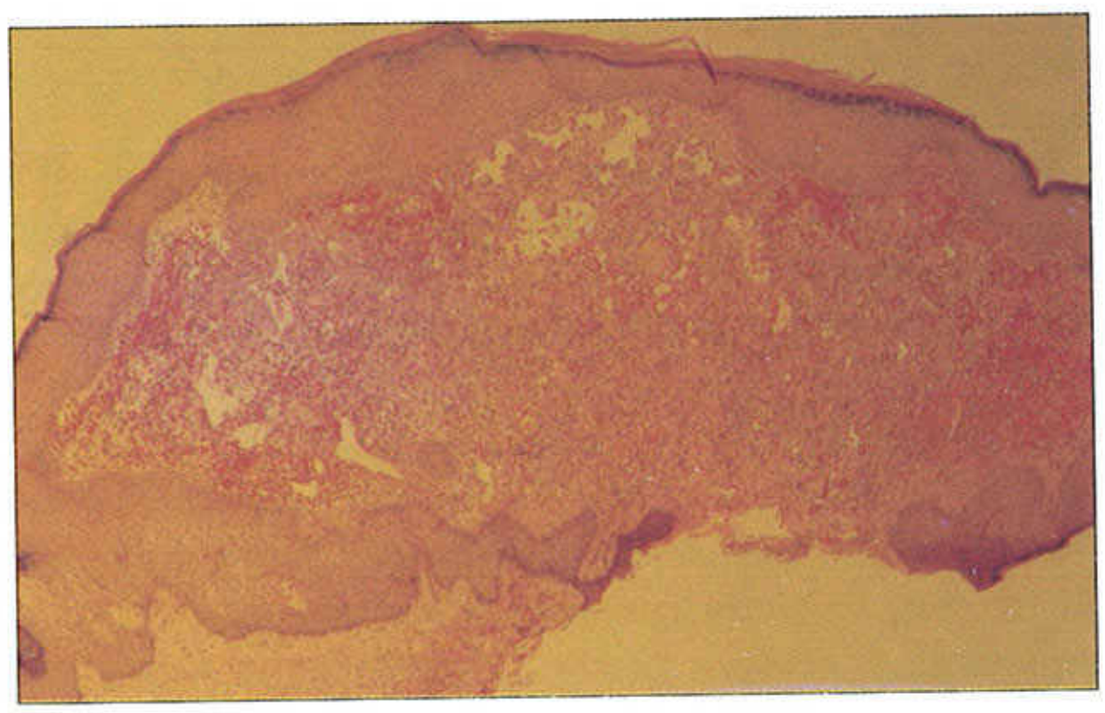
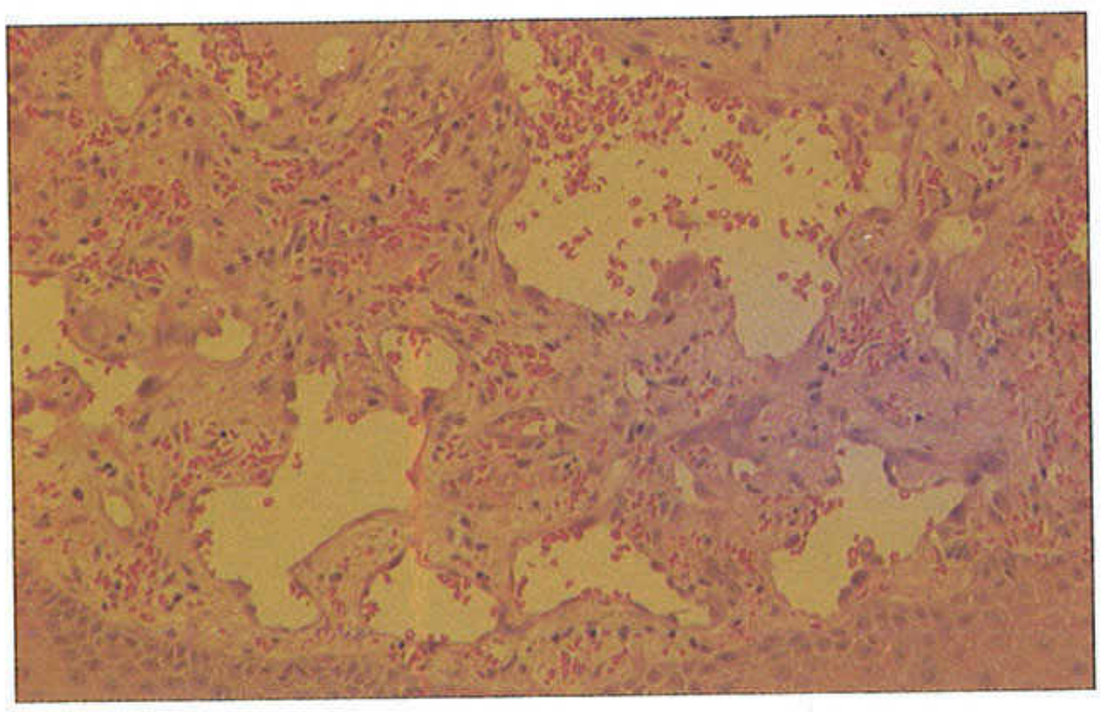


Fig. (5) : Lobular capillary proliferations.



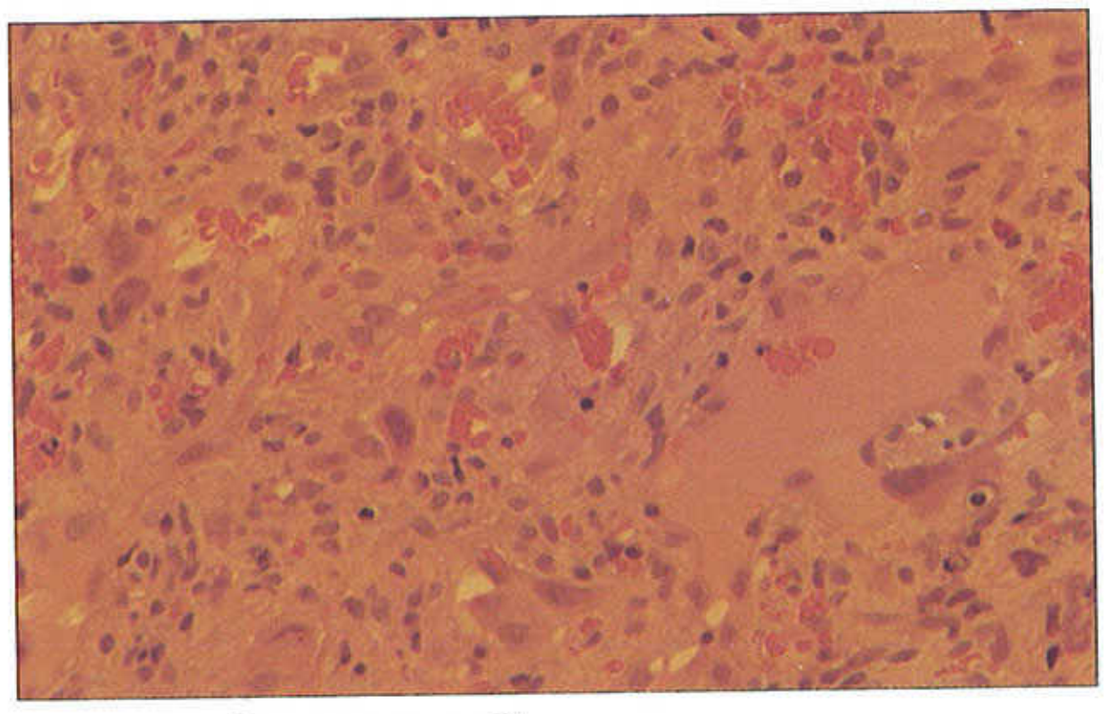


Fig. (6&7): Endothelial, neutrophil, and other inflammatory cells.

solitary or multiple, appear on the skin surface or be subcutaneous. The lesions on the surface may be freely mobile or may be fixed to the underlying structures, lesions on the skin are usually red purple or skin colored, dome-shaped or resemble pyogenic granuloma, angioma and kaposiís sarcoma[3]. The disease primarily affects patients with HIV infection[4] and is considered to be due to an opportunistic infection associated with HIV and immunosuppression[5]. Very rare cases have been documented in healthy persons without HIV infection[6].

The clinical differential diagnoses of (BA) includes pyogenic granuloma, hemangioma, and Kaposiís sarcoma[7]. Although Bacillary angiomatosis hitologically resembles several other vascular processes such as pyogenic granuloma, Kaposiís sarcoma and hemangioma[8], its histologic features are characterized by a lobular pattern of ectatic vascular proliferation in an edematous stroma. Some of the endothelial cells are cuboidal. Atypia and numerous mitotic figures may be seen in some cases.

Clusters of neutrophils and other inflammatory cells are Present. Granular deposits seen adjacent to the capillaries may reveal bacteria by Warthin-Starry staining and electron microscopy. Endothelial cells stain positively for FV111-Rag and CD 34 [9].

Because Bacillary angiomatosis is a bacterial infection, it usually responds well to antibiotic therapy. Erythromycin at a dosage of 500 mg four times a day for 4weeks to 2 months gives excellent results, other systemic treatments have given includes trimethoprim-sulfamethoxazole and ceftizoxime sodium with variable degrees of success. Despite treatment one to few nodules may persist and locally destructive measures such as excision, electrodessication and curettage, or cryotherapy are usually effective treatments.

It is essential to start treatment as soon as possible because death may result from visceral or mucosal involvement[10].

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Bacillary angiomatosis (case report).