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CLINICAL IMAGE

Paul of Aegina (ca 625-690 AD): an early description of a rare basal cell carcinoma of the breast

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Notable note - historical note of interest.

Key Clinical Message

Basal cell carcinoma of the breast is a rare type of skin cancer. A probable case reported c.650AD is described with very similar localized symptoms. Understanding its emergence and evolution could improve diagnosis and treatment.

Keywords

Antiquity, basal cell carcinoma, Paul of Aegina.

Basal cell carcinoma (BCC) is the most common skin cancer in humans. The diagnosis of suspected BCC is nowadays typically confirmed with incisional biopsy before referral to final surgery. Its signs may appear as follows: waxy papules with central depression, sometimes with pearly appearance, an erosion or ulceration often with central character and pigmented, black-blue or brown areas, bleeding areas especially when traumatized, rolled and raised border, oozing or crusted areas especially in large BCCs, translucency, slow growing, and telangiectases over the surface depicting a typical manifestation [1, 2]. Although most BCCs occur on the face, head (scalp included), and neck, they could also appear on the trunk or extremities, and rarely, they may occur on the breasts [3]. Paul of Aegina, an ancient Greek physician, as an expert in surgery, he was able to recognize various types of cancer, documenting breast cancer a malignancy of the most common ones. In his work, he had described such a case, presenting an uncommon and peculiar manifestation. He had macroscopically described a female breast cancer as an uneven, swelling, rough, unseemly, ulcerative, darkish, and painful, having veins with a spreading similar to the legs of the sea crab (Greek: *καρκίνος*, carcinus, an ancient Greek word for sea crab). He had further suggested partial lumbectomy, ligation of the blood vessels, and cauterization to promote cicatrization and prevent any metastases [4, 5]. Differential diagnosis may include benign skin lesions such as seborrheic keratosis with slightly elevated borders, waxy and scaly areas, cherry angiomas that may resemble melanoma when they bleed and dermatofibromas, simply a skin staphylococcus infection and melanomas, but none presents the visual manifestation of a dark vein network, painful from the beginning as described by Paul [5, 6]. Those two crucial points could lead to the hypothetical conclusion that Paul was the first to describe an uncommon, rare malignancy of the breast skin, known today as BCC, which presents spider-like veins surrounding the growth, hyper pigmented, erythematous plaque combined with local ulceration [7]. Paul of Aegina or Paulus Aegineta (Greek: *Παῦλος Αἰγινήτης*), native of the Greek island of Aegina, writer of the medical encyclopedia titled

Figure 1. Basal cell carcinoma of breast, Department of Surgery, Victoria Hospital, Bangalore, India [1].

"Medical Compendium" (Greek: Πραγματεία Ιατρικής) in seven books, was the last of the eclectic Greek compilers in Alexandrian School, a school with a notorious fame in anatomy and dissections both in humans and animals [4]. The fact that he had chosen to describe this case of breast cancer among the many he had encountered it proves its rarity and significance (Fig. 1).

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Authorship

GT: performed data analysis, drafted the work, and agreed to be accountable for all aspects of the work. MS: performed data acquisition, design of the work, final approval of the version to be published, and agreed to be accountable for all aspects of the work.

Conflict of Interest

None declared.

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