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Case Report

# Multi-focal superficial basal cell carcinoma of nipple and areola of 60 years female: A case report and a mini review

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ABSTRACT

Background; basal cell carcinoma (BCC) has been considered the commonest diagnosed skin cancer, which has been more evident on the sun-exposed areas of the head and neck. The number of reported cases which have been diagnosed with BCC of the areola and nipple is gradually increasing. BCC of the areola and nipple has been considered more aggressive than BCC which has been detected in other sites of the body, as it has a greater liability for local invasion and metastatic spread to regional lymph nodes. Thus, early diagnosis and management of BCC of the areola and nipple is beneficial to decrease the incidence of its spread, hence improve patient's prognosis. Up-till 2016, only fifty-five cases of BCC of the areola and nipple had been diagnosed and reported. In the current case study, we have diagnosed another characteristic case of multifocal BCC of the nipple and areola in a sixty years old female patient, who had complained of enlargement and multi-focal ulceration of the nipple and areola.

## 1. Introduction

Basal cell carcinoma (BCC) has been considered the commonest primary skin cancer, that incidence continues to increase worldwide. Despite its high rate of occurrence, BCC has a very low incidence of metastatic spread as its spread rate is less than 0.1% [1, 2]. BCC has been commonly detected on the sun-exposed areas of the head and neck. The number of reported cases which have been diagnosed with BCC of the areola and nipple is gradually increasing, but it has been still considered a rare histopathological diagnosis. BCC of the areola and nipple has been considered more aggressive than BCC which has been detected in other sites of the body as it has a greater likelihood for local invasion and metastatic spread to regional lymph nodes due to the presence of a rich sub-areolar lymphatic plexus; which is the lymphatic capillary network that originates in the dermis of the nipple and areola, terminates in the regional axillary lymph nodes, and provides a direct pathway for lymphatic spread of malignant cells [3–6]. Another explanation of the aggressive nature of BCC which has originated in the nipple and areola is its ability to invade the underlying lactiferous ducts, which subsequently leads to a greater ability of invasion of the deeper soft tissue of the breast [6]. Thus, early diagnosis and management of BCC of the areola and nipple is needed to decrease the incidence of its spread, hence improve patient's prognosis. Up-till 2016, only fifty-five cases of BCC of the areola and nipple have been diagnosed and reported worldwide. BCC of the nipple and areola has been more commonly diagnosed in men (35, 63.6%) than in women (20, 36.4%) and age of onset of its detection ranged from thirty-five to eighty-six years old. The age of onset in men and women was reported between 60 and 66 years, respectively. BCC of the nipple and areola was detected more frequently on the left side than the right side [4]. There is only one reported patient who has been diagnosed with bilateral affection of nipples and areolae with BCC [7]. The most common histopathological subtypes of BCC which have been diagnosed in the nipple and areola were; nodular BCC in 42.9% of cases and superficial BCC in 30.9% of cases; while less frequent subtypes which have been reported are; pigmented BCC in 26.2% of cases, BCCs with a mixed histology in 16.7% of cases and fibro-epithioloma of Pinkus BCC in 9.5% of cases. There are four patients that have been diagnosed with mixed aggressive BCCs which are infiltrative subtype in 42.9% of cases and micro-nodular subtype in 14.3% of cases [4]. There are other less common BCC subtypes which have been reported e.g. ulcerated, kerotic, infiltrative and multi-centric subtypes [5].

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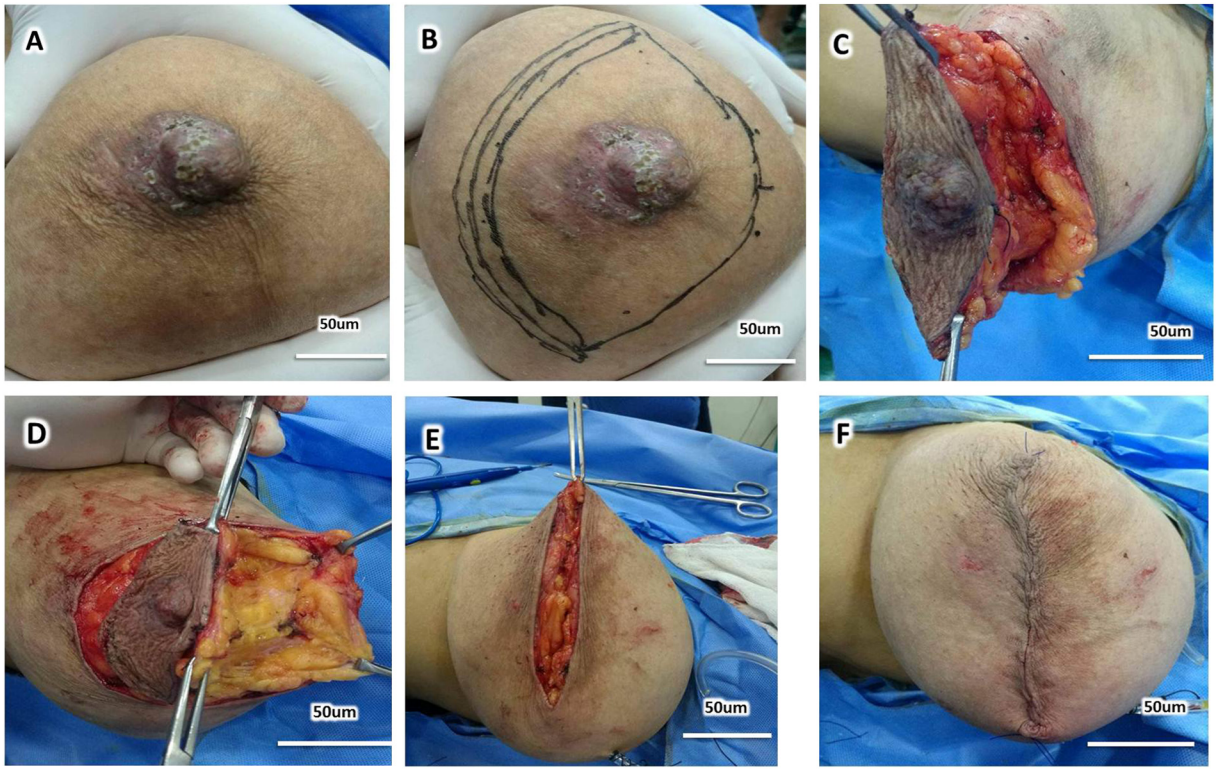


**Fig. 1.** A and B Preoperative description of a multifocal lesion in the nipple and areola, C and D surgical excision of the nipple, areola and sub areolar lymphatic plexus with safety margin E and F closure of the skin after excision of the lesion with safety margin.

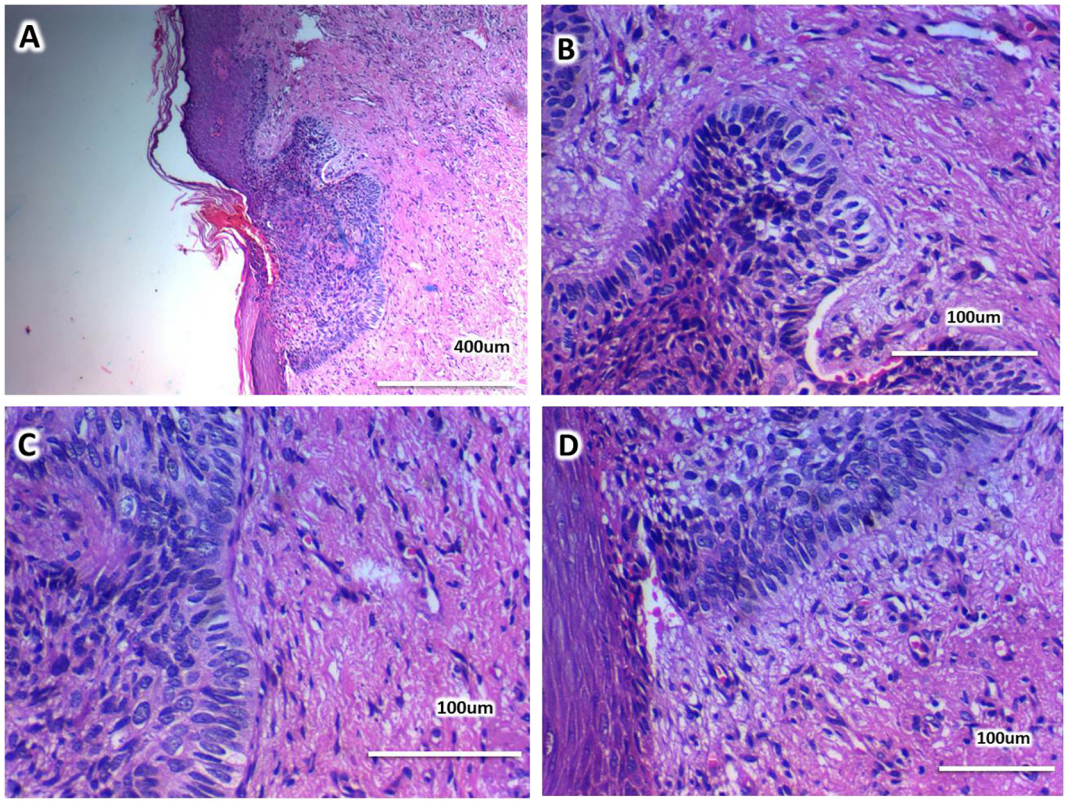


**Fig. 2.** A–D; superficial Basal cell carcinoma of the nipple and areola stained with hematoxylin and eosin stains showed proliferating nests of basaloid cells with scanty cytoplasm and elongated hyperchromatic nuclei, peripheral palisading, cells are arising from epidermis and extending into superficial dermis and nipple stroma. Original magnification AX100, B-DX400.