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STUDY OF FACIAL MALIGNANT SKIN TUMORS IN A RANDOMIZED GROUP

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ABSTRACT

Objective: The aim of the study is to examine skin cancers on the face, study their prevalence, and review the risk factors of them. **Materials and Methods:** This is a cross-sectional study of all the patients who reviewed private clinics in Damascus, Syria and were diagnosed with malignant skin lesions in the face. This study included 59 patients who were diagnosed between 1/1/2019 and 31/12/2019. Statistical analysis of this study was done using SPSS 25.0. **Results:** Most of the patients were between 60-70 years old followed by 50-60 years old. Squamous cell carcinoma (SCC) was the most common in males, while in females basal cell carcinoma (BCC) was the most common. According to the site of the lesion, nose was the most common. It should be noted that SCC was the most common lesion overall. **Conclusion:** Squamous cell carcinoma (SCC) was the most common in males, however, in females basal cell carcinoma (BCC) was the most prevalent. Larger-scale studies of the prevalence and incidence of facial malignant skin tumors is needed to further understand them and to aid in the earlier diagnosis and thus better prognosis.

KEYWORDS: Facial skin tumors, Syrian Population, Lesions.

INTRODUCTION

Skin cancer, including both malignant melanoma (MM) and non-melanoma skin cancer (NMSC), represents the most common malignancy in Caucasians.[1–10] The incidence of both MM and NMSC is on the rise, with an annual increase in MM of 0.6% among adults over 50 years.[11] The estimated number of new cases of skin melanoma in 2016 is 76,380, which represents 4.5% of all new cancer cases.[12] Deviations in reported incidence rates exist and are attributed to varying risk factors amongst different populations, as well as discrepancies in national registration systems. Furthermore, the incidence of melanoma may be even higher

than indicated, as the National Cancer Registries has reported an underestimation of its incidence in certain countries.[13]

The increased incidence of melanoma has not been accompanied by a corresponding increase in mortality rates.[12] This has led to the question of whether there is a true melanoma epidemic, or if the increased incidence represents an epiphenomenon attributable to over-diagnosis resulting from intense screening and more biopsies.

The increased incidence of melanoma involves all thickness groups and is independent of socio-economic status (a surrogate marker for access to care and screening), suggesting that increased screening and biopsy alone cannot account for the dramatic change observed.[14, 15] This finding is in agreement with the results reported by Shaikh et al., who showed that thickness increased in T3/T4 tumors and nodular melanoma.[16] These observations together "suggest that the melanoma epidemic is real and not simply an artefact of increased detection pressure of earlier-stage T1/T2 lesions".[16]

Conversely, there is evidence that over-diagnosis may have a part to play. Recent epidemiologic studies indicate that melanoma in situ, with an annual incidence of 9.5%[12], occupies a disproportionately high percentage of the overall increase in MM incidence.[17] From the dermatopathological point of view, there are studies suggesting a current trend towards reclassification of prior non-malignant diagnoses as MM.[18] Furthermore, in a population-based study correlating the number of skin biopsies and the incidence of MM, the investigators noted that there was a parallel increase during a 15-year period, suggesting that the MM epidemic may also be related to increased scrutiny and number of biopsies.[19]

NMSC includes, amongst others, Bowen's disease, basal cell carcinoma (BCC), and squamous cell carcinoma (SCC). In Caucasians, the incidence of NMSC is higher (by as much as 18–20 times) than that of MM.[20–22] However, there are significant limitations to NMSC epidemiology, mainly attributed to marked geographic variations in incidence rates, as well as to exclusion of NMSC by large cancer registries due to low mortality rates. Even secondary analyses, whereby incidence data are extracted from administrative healthcare databases, are comparatively limited.[23]

NMSC carries a substantial economic burden.[24, 25] In Australia, it is the most costly cancer, accounting for expenditure of AUS$511 million in 2010.[24] In the USA, it has been estimated

that total annual NMSC-related expenditure is US$650 million, with Medicare costs 6–7 times greater than those for treating melanoma.[26]

The observed increases in skin cancer rates are associated with several factors, including the transition toward significantly older populations that are associated with a higher risk of NMSC.[27] However, research has also revealed the important role of increased occupational and recreational UV light exposure.[22, 28] For example, women <40 years exhibited a constant linear increase in BCC incidence rates of 6.3% between 1973 and 2009[29], and studies have shown that indoor tanning is associated with a significantly increased risk of BCC and SCC, with a higher risk with use in early life (<25 years).[30]

MATERIALS AND METHODS

This is a cross-sectional study of all the patients who reviewed private clinics in Damascus, Syria and were diagnosed with malignant skin lesions in the face. This study included 59 patients who were diagnosed between 1/1/2019 and 31/12/2019. To ensure the privacy, only the authors collected all the data and all the names and personal information were blinded. Statistical analysis was done using SPSS 25.0.

RESULTS

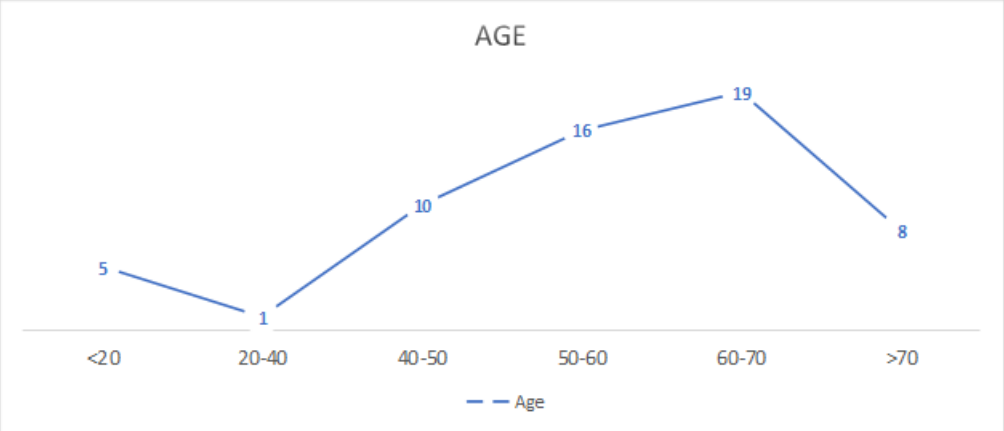

Figure 1: Age of the Participants.

Most of the patients were between 60-70 years old followed by 50-60 years old, while only 5.8% were <20 years old. Regarding gender, males were more common in 30 cases compared to females with 21 cases.

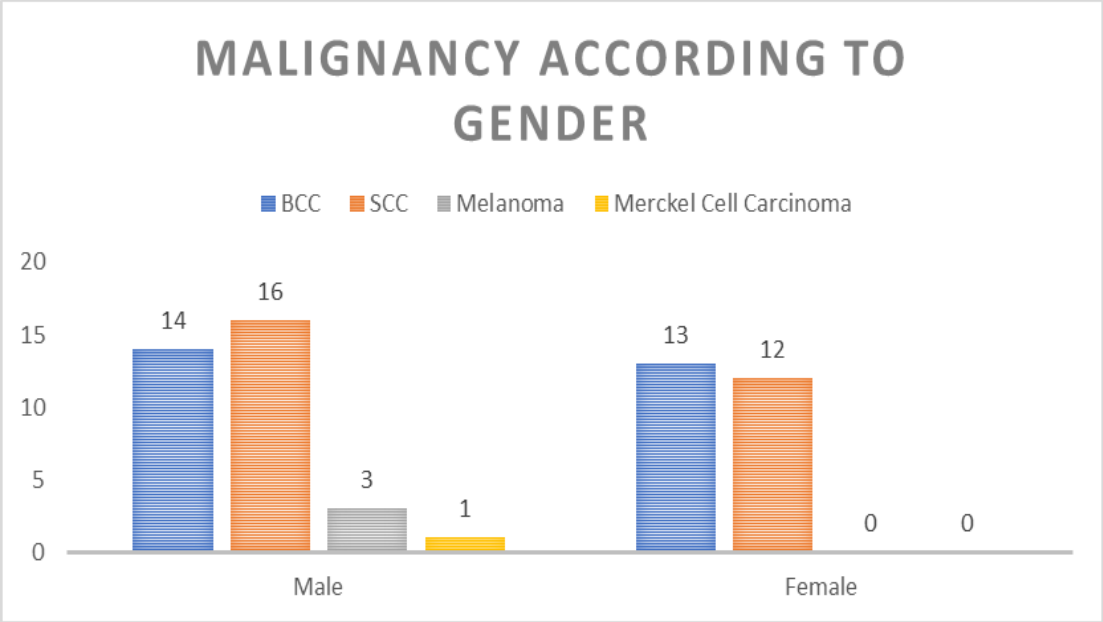

Figure 2: Malignancy Type According to Gender.

SCC was the most common in males with 16 cases, BCC in 14 cases, Melanoma in 3 cases and 1 case with Merkel cell carcinoma. In females, 13 cases were BCC and 12 cases were SCC.

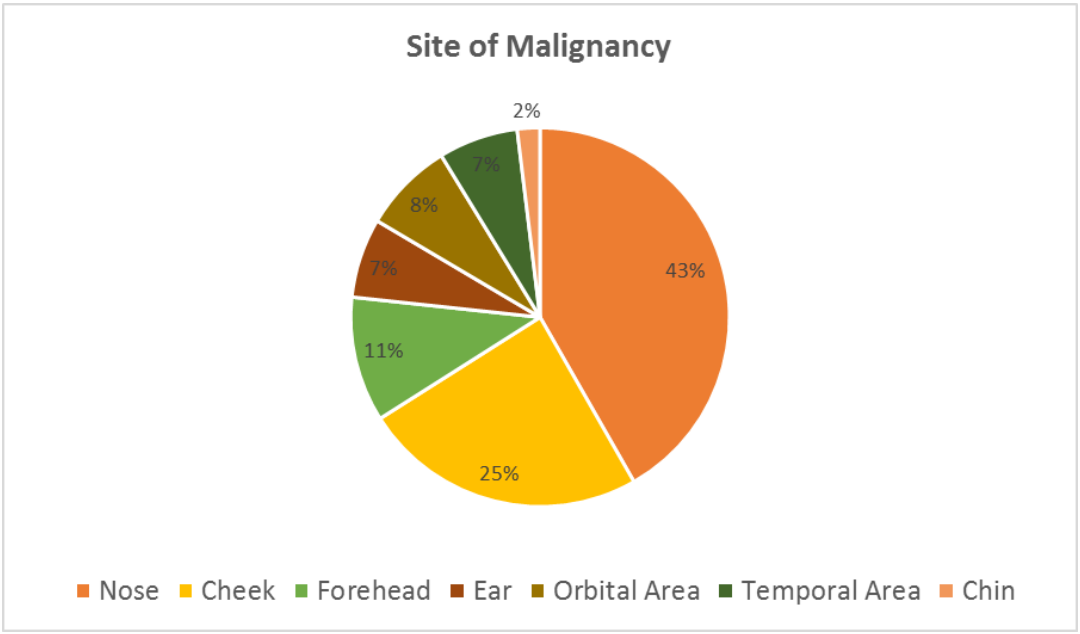

Figure 3: Site of Malignancy in the Face.

According to the site of the lesion, nose was the most common in 43%, cheek in 25% and Forehead in 11%. Temporal area and chin were the least common in 7% and 2%, respectively.

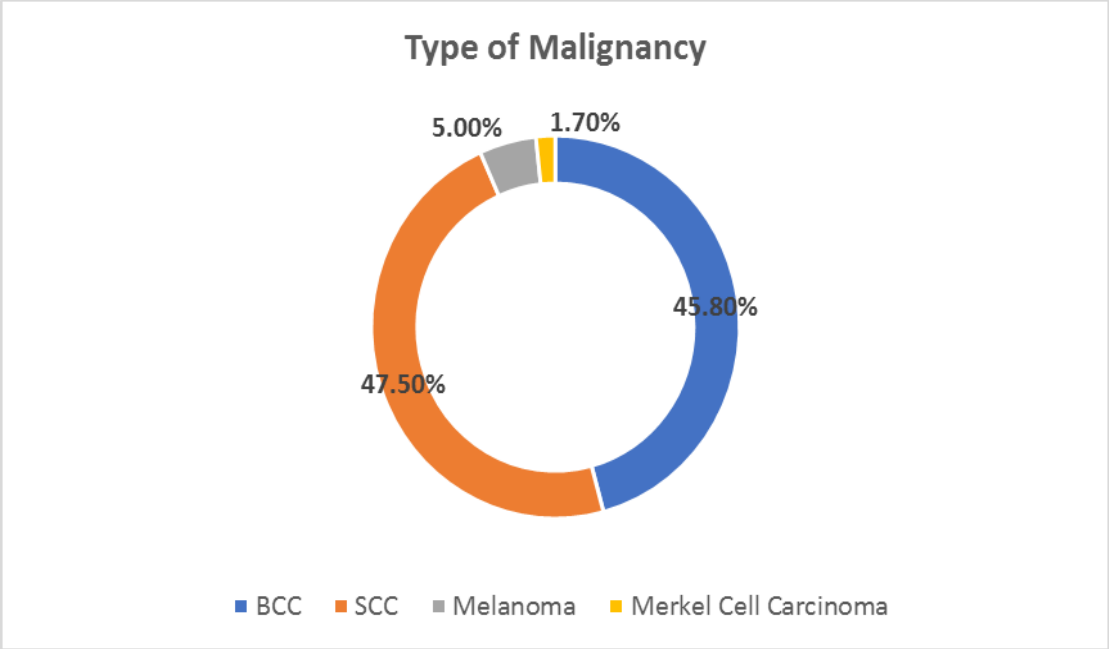

Figure 4: Type of Malignancy in our Study.

SCC was the most common lesion with 47.5%, followed by BCC in 45.8%, 5% had Melanoma and 1.7% had Merkel cell carcinoma.

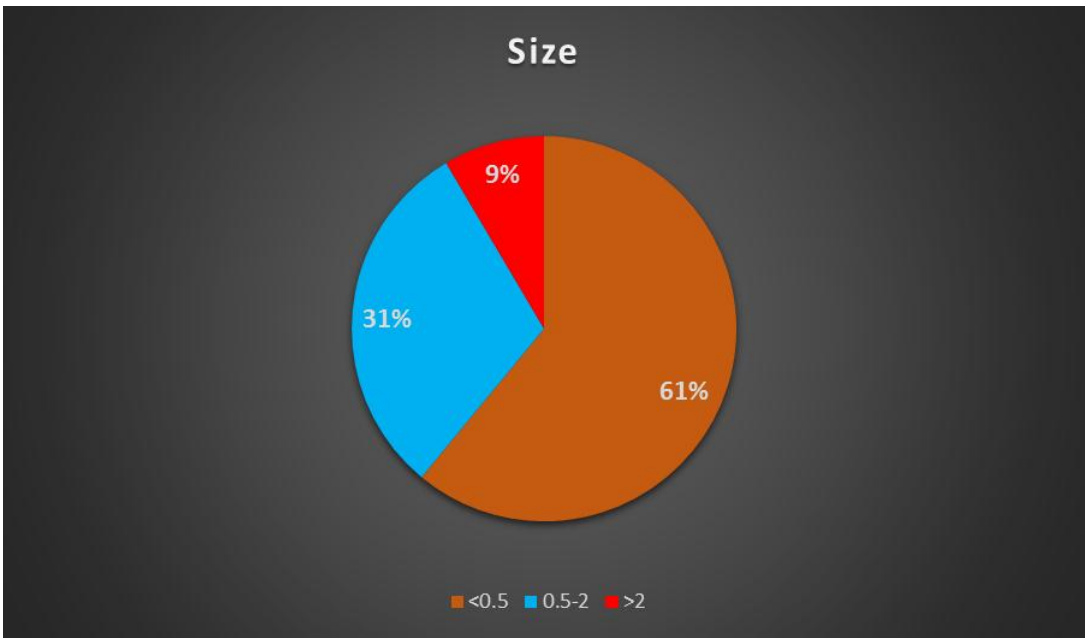

Figure 5: Size of Lesions.

36 cases were less than 0.5 cm, 18 cases were between 0.5-2 cm, while 5 cases were bigger than 2 cm.

DISCUSSION

Most of the patients were between 60-70 years old followed by 50-60 years old, while only 5.8% were <20 years old. Regarding gender, males were more common in 30 cases compared to females with 21 cases.

SCC was the most common in males with 16 cases, BCC in 14 cases, Melanoma in 3 cases and 1 case with Merkel cell carcinoma. In females, 13 cases were BCC and 12 cases were SCC.

For risk factors, the type of work (Farmers) and therefore sun exposure was the most common risk factor with 43 cases, followed by smoking with 39 cases. Immunodeficiency was the least common risk factor with only 2 cases.

According to the site of the lesion, nose was the most common in 43%, cheek in 25% and Forehead in 11%. Temporal area and chin were the least common in 7% and 2%, respectively.

SCC was the most common lesion with 47.5%, followed by BCC in 45.8%, 5% had Melanoma and 1.7% had Merkel cell carcinoma.

36 cases were less than 0.5 cm, 18 cases were between 0.5-2 cm, while 5 cases were bigger than 2 cm.

In a similar study[31], males were also more common with 58% compared to 58.8% in our study. Patients between 60-70 years old were most common in our study compared to those between 40-60 in a similar study.[31] SCC was more common in our study, while BCC was more common in a similar study. The most common location in both studies was the same, nose then cheek.

CONCLUSION

An overview of the currently available literature illustrates the paucity of accurate information on facial malignant skin tumors, and highlights the need for large-scale epidemiologic research exploring the prevalence and incidence of facial malignant skin tumors to further understand them and to aid in the earlier diagnosis and thus better prognosis.

Compliance with Ethical Standards

Funding: This study was not funded by any institution.

Ethical approval: The names and personal details of the participants were blinded to ensure privacy.

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