Immunocryosurgery: An Alternative and Effective Treatment for "Difficult-to-Treat" Basal Cell Carcinoma

Dear Editor,

Basal cell carcinoma (BCC) is the most common malignancy worldwide. As a pragmatic approach, European Consensus classified BCC as easy totreat and difficult to treat. They defined difficulttotreat BCC as all locally advanced BCCs and also common BCCs with management problems due to technical difficulties or conditions related to the patient (1). Even surgery is the gold standard treatment for difficult to treat BCC; considering the treatment's potential risks and patients' preferences, alternative treatment modalities might be preferable. Immunocryosurgery, which is an innovative and minimally invasive combined therapeutic procedure, is one of these modalities with excellent efficacy even in challenging cases.

Immunocryosurgery is based on the principle of activating the immune system against the tumor first, then triggering massive liberation of tumor antigens via destruction of tumor cells, and keeping the immune system activated against the tumor afterwards (2). The procedure's efficacy is 95 % after one cycle and 99 % overall (3); the five year tumor-free rate after one cycle is 91 % and 97 % overall (4) in BCCs smaller than 2 cm in diameter. In BCCs larger than 2 cm, the procedure's efficacy is approximately 75 % (2), and repetitive sessions may be required. These efficacy data are nearly comparable to standard surgical excision but with a significantly lower risk of complication (5).

Here, a case with difficult to treat BCC treated with immunocryosurgery is presented. The 91 year old patient presented with a nonhealing wound on her nose. The lesion was painful and itchy. Her medical history included coronary heart disease, a history of myocardial infarction, coronary artery bypass grafting, and dementia. Dermatological examination revealed a 27 × 12 mm ulcer on her nasal tip with multiple actinic keratoses and severe solar damage (Figure 1). An incisional biopsy was performed with a preliminary diagnosis of basal cell carcinoma; histopathological examination confirmed the diagnosis

Figure 1. A 27 × 12 mm ulcer on the nasal tip with surrounding actinic keratoses and marked photodamage.

Figure 2. Complete clinical resolution eight weeks after a single cycle of immunocryosurgery.

nodular subtype. The patient and her legal guardians were informed about treatment options. They denied classical surgical intervention because it would have required highrisk, extensive surgery. We decided to perform immunocryosurgery. She was given imiquimod 5 % cream daily for two weeks. At the end of the second week, open spray liquid nitrogen cryosurgery (two freeze-thaw cycles, 20 second freezing time each) was applied to the inflamed BCC and a 5 mm margin under local anesthesia. Imiquimod 5 % cream was continued for an additional three weeks; afterwards, a topical epithelising cream was applied until the healing process was completed. By the end of the eighth week, she had achieved a full clinical response (Figure 2), and her subjective symptoms had completely disappeared. During the 12 month follow-up, there was no recurrence.

The key point of difficulttotreat BCC management is tailored treatment. All treatment modalities should be discussed with the patient, and decisions should be made together, considering not only tumor biology and risk factors but also the patient's preferences. Especially in patients of advanced age and with multiple comorbidities, it should be kept in mind that extensive surgeries may be complicated, increase morbidity, and reduce quality of life. Immunocryosurgery is an alternative and effective treatment that can save the day.

References

1. Peris K, Fargnoli MC, Garbe C, Kaufmann R, Bastholt L, Seguin NB, *et al.* Diagnosis and treatment of basal cell carcinoma: European consensus-based interdisciplinary guidelines. Eur J Cancer. 2019;118:1034.
2. Gaitanis G, Bassukas ID. A review of immunocryosurgery and a practical guide to its applications. Diseases. 2021;9(4):71.
3. Gaitanis G, Bassukas ID. Immunocryosurgery for nonsuperficial basal cell carcinoma: a prospective, openlabel phase III study for tumours ≤ 2 cm in diameter. Acta Derm Venereol. 2014;94(1):3844.
4. Gaitanis G, Bassukas ID. Immunocryosurgery for nonsuperficial basal cell carcinomas ≤ 20 mm in maximal diameter: fiveyear followup. J Geriatr Oncol. 2019;10(3):475478.
5. Gaitanis G, Seretis K, Zampeta A, Spyridonos P, Bassukas ID. A singlecentre retrospective comparison of immunocryosurgery with standard surgical excision for the treatment of nonsuperficial headandneck basal cell carcinoma. J Eur Acad Dermatol Venereol. 2024;38(2):e134e136.

Ece Gokyayla[1]

[1] *Department of Dermatology and Venereology, Uşak Research and Training Hospital, Uşak, Turkey*

ecegokyayla@gmail.com