



RESEARCH ARTICLE

AMPUTATION OF THE INDEX FINGER IN MELANOMA AND INDEXING OF THE MEDIUS: CASE REPORT

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Abstract

We report the case of a 50-year-old patient, referred by the dermatology department of the Mohammed VI University Hospital of Marrakech for amputation of the index finger due to a melanoma diagnosed by biopsy. The amputation was performed using the Chase technique. The aesthetic and functional result was very satisfactory after the operation.

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Introduction:-

Chase's intervention spreads to the objectives of treatment by indexing the medius which will ensure pollicidigital grip [1]; preserve strength; and respect the aesthetic aspect of the hand. We report the case of a 50 year old patient, referred by the dermatology department of the Mohammed VI University Hospital of Marrakech for amputation of the index finger following a melanoma diagnosed on biopsy. The amputation was performed according to the Chase procedure. The aesthetic and functional result was very satisfactory after surgery.

Patient And Observation:-

This is a 50-year-old patient, right-handed, craftsman by profession, admitted for a blackish lesion opposite the distal interphalangeal joint of the left index finger which dates back six months and has become ulcerated, painful and progressively increasing in volume.

Clinical examination found a blackish ulcerating lesion on the latero-posterior surface of the left index finger, about 6 cm/4 cm in size, painful and bleeding on contact (Figure 1).

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Figure 1:-

Clinical examination of the lymph nodes did not reveal any adenopathy, and the axillary ultrasound revealed a hypoechoic left axillary adenopathy; The CT scan of the hand showed a lesion process on the external palmar surface of the second finger (2-3rd phalanx) infiltrating the hypodermal fat without bone lysis. The biopsy came back in favor of a nodular acrolentiginous melanoma confirmed by immunohistochemistry.

The patient underwent amputation using the Chase technique, which consists of amputation at the base of the second metacarpal, allowing indexing of the medius and homolateral axillary curage (Figure 2).



Figure 2:-

The patient benefited from an early rehabilitation and a follow-up in oncology. The 6-month follow-up showed a good aesthetic and functional result of the hand with a good opening of the thumb-median commissure, indexalization of the median, and satisfaction of the patient with the aesthetic and functional aspect of his hand(Figure 3), allowing him to reintegrate into society and work.



Figure 3:-

Discussion:-

The index finger is the most used finger after the thumb. It is an essential element of the pollicidigital grip and a stabilizing element in the global digitopalmaric prehension as well as an important role in the aesthetics of the hand and daily gestures. Any amputation, however small, alters the function and socio-professional integration [2]. Chase amputation: consists of an amputation at the base of the second metacarpal, which allows indexing of the medius and has the advantage of ensuring maximum opening of the thumb-medius commissure [2].

Indexing the medius leads to a better integration and function of the finger [3]. Operating protocol [4]: Skin time: the incision is usually dorsal in order to avoid a potentially embarrassing palmar scar; it circumscribes the base of the index finger in a "snowshoe" fashion; Tendon and bone time: the extensor apparatus is sectioned dorsally.

The extensor indicis tendon is sectioned upstream of the metacarpophalangeal joint, then transferred to the extensor digitorum tendon for the medius by a latero-lateral suture. The adductor pollicis is disinserted from the second metacarpal and the bony section of the base is oblique down and out, preserving the carpo-metacarpal joint.

The flexor tendons are cut proximally with the wrist in flexion. The terminal tendon of the first dorsal interosseous is sutured to the tendon of the second interosseous. This transfer allows an efficient radial inclination in thumb-medium grasps as well as better strength; Vasculonervous time: the collateral nerves, dissected proximally, are cut high in the palm.

For some, the collateral nerves can, after section, be buried in the first dorsal interosseous. With this technique, the dexterity of the hand is greatly improved and its appearance is more aesthetic [5]. The disadvantage reported in the literature is the decrease in overall hand strength, especially in pronation, due to the decrease in hand width [6].

Conclusion:-

Surgery is the reference treatment and often the only treatment necessary for skin cancers, provided that the procedure is carcinological. However, in the case of finger tumors, the function of the hand must also be taken into consideration. The principle is not to keep a level that is not functionally better than the one that would have been obtained by shortening the bone, in order to give a correct function to the hand with a satisfactory aesthetic result.

Conflicts of Interest :

The authors declare no conflicts of interest.

Author contributions:

All authors contributed to the conduct of this work. They also declare that they have read and approved the final version of the manuscript.

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