SURGICAL TREATMENT OF LOWER LIMB MALIGNANT MELANOMA IN YAOUNDE – CAMEROON

Pisoh T C 1, Ngowe Ngowe M, Watcoun-Nchinda E P 1, Farikou I 1 Mbuagbaw J 2, Kegoum B3, Takongmo S 1, Sosso AM1

1. Department of Surgery
   Faculty of Medicine and Biomedical Sciences,University of Yaoundé Cameroon.
   2. Department of Medicine
   Faculty of Health Sciences Buea, Cameroon
   3. Department of morbid Anatomy FMBS, Yaoundé, Cameroon

CORRESPONDENCE: Dr PISOH TANGNYIN CHRISTOPHER
CHU – YAOUNDE, CAMEROON
Tel: 237. 77635107 . E. mail: pisoh@yahoo.fr.

SUMMARY :

Aim: This study was carried out to present our surgical experience with malignant melanoma (MM) in the University Hospital Centre of Yaoundé Cameroon.

Patients and methods: In this study, the file of patients with strong suspicion for MM and subsequently admitted for surgery between December 1996 and January 2010 were reviewed. We recorded the country of origin; the age; and the sex of the patients, the site, the duration, and after excision, the type, the depth, and stage of the tumour as well as the definitive surgery offered.

Results: 29 patients had confirmed MM of the lower limb in 14years. Their main age was 56.53years with extremes of 26years to 82years. There were 11males and 18females. The patients were all black Cameroonians except one Lebanese. The tumours were located on the plantar surface of the foot in 28cases and on the ankle in one case. The duration varied from 7months to 5years before reporting to the hospital. Twelve patients presented with advanced disease at diagnosis with inguinal metastases in three cases and abdominal metastases in two cases . Histology showed increased tumour thickness in most cases (Clark C). 15 cases had excision and skin grafting with relapses in four of them within 6months while seven had excision and primary closure with local flaps. Eight patients were offered amputation but refused. Two year survival rate was 35%.

Conclusion: Malignant melanoma of the lower limb is a disease seen more in the female black Cameroonian above 50yers of age. The tumour is located mostly, on the plantar surface of the foot. It is seen late due to late reporting. Public sensitization for its early diagnosis when the tumour is small and superficial could improve its prognosis since wide excision and primary closure will be curative.

Key words: Malignant melanoma, skin cancer, naevus.

RESUME

But: Nous avons mené cette étude pour présenter notre expérience chirurgicale avec le mélanoms malin (MM) au Centre Hospitalier et Universitaire (CHU), Yaoundé, Cameroun.

Patients et méthodes : Dans cette étude, le dossier de tout patient suspecté pour le MM et admis pour la chirurgie entre décembre 1996 et janvier 2010 a été revu. Nous avons noté le pays d 'origine, l'^age, et le sexe des patients, le site, la durèe, et aprés l'exérèse le type, le profondeur, et le stade de la tumeur de même que la technique chirurgicale définitive offerte.

Résultats : 29 patients avaient un MM confirmé en 14ans entre décembre 1996 et janvier 2010. L'^age moyen était de 56, 53ans avec les extrèmes de 26ans à 82ans. Il y avait11patients males et 18patients females. Tous les patients étaient des noirs Camerounais sauf un patient Libanais. Les tumeurs siégeaient à la surface de plantes du pied dans 28cas et cheville dans un cas. Le délai de la consultation était de 7mois à 5ans. Douze patients se sont présentés avec une maladie avancée au diagnostic avec métastase inguinale dans trois cas et abdominale dans deux cas. L'histologie a monteé une épaisseur importante de la tumeur (Clark C) la plupart de temps. 15 cas ont subi une exérèse, greffe cutanée avec récidive dans quatre cas en six mois alors que sept ont subi une exérèse avec fermeture par des lambeaux locaux. Huit patients ont refusé l'amputation. Le taux de survie à 2ans était de 35%.

Conclusion : Le mélanome malin du membre inférieur est une maladie vue souvent chez la maire Camerounaise agée de plus de 50ans d'age. La tumeur siege souvent sur la surface plantaire du pied. Elle est vue tard à cause de la présentation tardure à la cousultation. La sensibilisation du publie pour un diagnostie piecoce pourrait améliorer le pronostie puisque son exérese large et une fermeture primaire peut étre curative.

Mots clés : Mélanome malin, cancer de la peu, le naevus.

INTRODUCTION

Malignant melanoma (MM) is a dangerous tumour developed from melanocytes1). Exposure to sunlight is a major, precipitating factor on fair skin (2). It is therefore commonest on faire skins. In African albinos with fair skin, it is rare (1,3). It appears on depigmented areas in the black race occurring on the sole, the palm and the mucosa.

It is commoner in women with a high family history (4,5). In most series naevi have been shown to predispose to MM development in 50% of case (2,6). In the black race, naevi may also play a role but other mechanisms like trauma may also be implicated (7) especially in foot walkers since the soles are the main areas of the location of MM in the blacks (8).

The treatment of localized MM consists of wide excision (8). However, deep invasion, the site, the large size of the tumour may render this difficult. Tumours less than 2cm in diameter with minimal invasion (<0.7cm)are curable. Lentigo Maligna and superficial spreading MM without deep invasion have favourable prognosis in that case. Nodular MM particularly if ulcerated with deep invasion are only curable by radical surgery in the lower limbs.

We present our experience of managing cases of MM seen in our dermatology and surgical clinics as per a predetermined protocol based on minimal investigations and maximum excision on suspicion.

PATIENTS AND METHODS.

This study was conducted in the University Hospital Center (UHC) of Yaoundé, an Urban Centre. This study was conducted between December 1996 and January 2010. During this period, whenever clinical suspicion of MM was strong in front of any lower limb lesion, wide surgical excision was proposed, carried out and histology done. Suspicion was based on the asymmetry, the border irregularity, the colour variability, and on a diameter greater than 6mm of the lesion. In some cases after histology, complimentary surgery was done. After the surgery, follow up was done at three months, six months and yearly for a maximum of five years.

We reviewed the case recording, the country of origin, the age and the sex of the patients, the site and duration of the MM and after excision, the type, depth and sage of the tumour as well as the type of definitive surgery that was carried out.

All ethical requirements were respected.

RÉSULTATS.

A total of 29 patients had confirmed MM of the lower limbs in 14years. There were 11males and 18females. The age range was 26 to 82 with a mean age of 56.53 years. All the patients were Cameroonians mostly from the grass field where foot walking to farms is commonly practiced except a Lebanese. The tumour were plantar in 28 cases (95%) (fig 1,2) and on the ankle in one case (5%).

The duration of the lesion varied from seven months to five years before reporting for consultation in the hospital. Eight of the patients presented with advanced disease with metastasis at diagnosis to inguinal lymph nodes. (fig 3) in cases and abdominal in two cases.

Histology showed increased tumour thickness classified in most cases. Stage III was commonest. Excision with skin grafting was done in 15 cases with recurrence in four within 6months while seven had excision and primary closure with local flaps. Inguinal lymph node dissection was done in three cases. In the four cases with recurrence, one case ith metastasis to the liver and the case with eye, involvement no surgery was done. One case of wide excision with skin grafting (fig 4) relapsed after eight months at the same site, developed liver metastasis and died. Eight patients were offered amputation but refused and some were offered survival rate was 35%

DISCUSSION :

This study was designed with the assumption that any asymmetrical skin lesion more than 6mm in diameter with irregular border, colour variability on the lower limb especially the plantar surface of the foot was MM. It had to be excised at once. We did not use the gold of biopsy, extension before major surgery.

A total of 29 cases of lower limb MM were received and confirmed histological within a period of 14yeears. This sample was judged large enough for analysis. There was a female predominance. This is similar to the finding in most series (1,8,10). Age above 50 years was common. This was also found by Giraud et al in South Africa (3) and George et al in Nigeria (1).

Plantar lesions dominate the localization of the tumours. This confirms the suspicion that the blacks are more likely to have MM on depigmented areas like the sole, thee palm and the mucosa (1,8,10). These are generally not areas exposed to sunlight. In our

series no case described the onset to be naevi related. It is probable a different factor like repeated minor trauma could be responsible for its precipitation (6), though naevi cannot be completely ruled out being commoner on the soles of blacks at age above 50 years(1). There was no albinos in the sample. This scarcity has been described in Nigeria (1,6). The fact that most od our patients were aged 50 to 82 years cold, account for this. At this period most albinos would have had other fatal tumours.

Our cases mostly presented with invasive tumours classified and metastasis. This was probably linked to late reporting from ignorance, the MM being associated with minor trauma, with a likelihood of spontaneous healing especially as most cases were found in foot walking grass field subsistent farmers. Lymph node dissection was not curative as noted in most series (11,12).

CONCLUSION :

MM of the lower limb is a disease of the female patients above 50 years of age n Cameroon. It is Mostly Located on the plantar surface of the foot. It is most likely to be seen in the invasive metastatic stage due to late reporting. Its prognosis depends on early diagnosis, tumour size, depth of invasion site and type.

Generally, early diagnosis of small sized superficial, acral lentiginous melanoma have better prognosis. At this stage, wide excision is curative.

Appendix

Fig 1- Plantar MM

Fig 2: Plantar MM

Fig 3: Inguinal metastasis of MM

Fig 4: Recurrence of MM

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