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Teledermatology 2-week-wait skin cancer referrals during the COVID-19 pandemic: a service evaluation

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Dear Editor.

With the impact of the COVID-19 pandemic, the British Association of Dermatologists (BAD) advised the use of teledermatology for skin cancer referrals from primary to secondary care. However, a disproportionate increase in 2-week-wait (2WW) referrals to secondary care dermatology was noted. To understand the reason for this, we evaluated the effectiveness and appropriateness of teledermatology services for skin cancer referrals. The locally agreed standards for the use of teledermatology for 2WW referrals were for all patients with suspected skin cancers to be given face-to-face (F2F) consultations by general practitioners (GPs) before referral into secondary care.

Over a 2-week period in May 2021, we reviewed all 2WW referrals to the dermatology department. We identified 120 referrals, of which 106 (88%) were via GPs and 14 (11.7%) via advanced clinical practitioners (ACPs) or advanced nurse practitioners (ANPs). The patients' photographs alone were used in 33 of 106 (31%) GP referrals and 9 of 14 (64%) ACP/ANP referrals. Of the 106 GP referrals, 73 (69%) had been seen in F2F consultations with the GP. Of the 120 suspected diagnoses made by GP/ACP/ANP, 76 (63.3%) were referred as either malignant melanoma (MM), squamous cell carcinoma (SCC) or other malignant (OM) (Fig. 1). Dermatologist assessment identified 16 of the 120 total referrals (13%) as suspected MM/SCC/OM (1 lentigo maligna, 1 sarcoma/lymphoma) (Fig. 1). Over a quarter of the total referrals (32/120, 26.6%) were diagnosed as seborrhoeic warts by a dermatologist (Fig. 1). One case referred as suspected SCC on the face was found during dermatology review to be a basal cell carcinoma (BCC) instead;

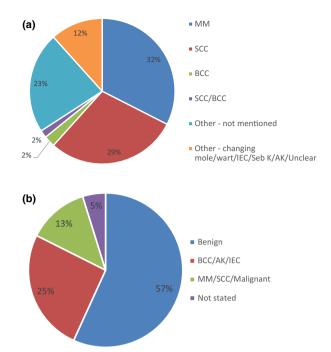


Figure 1 (a) Provisional diagnoses by general practitioner (GP), advanced clinical practitioner (ACP) or advanced nurse practitioner (ANP); (b) provisional diagnoses by dermatology department of all GP/ACP/ANP referrals. AK, actinic keratosis; BCC, basal cell carcinoma; IEC, intraepidermal carcinoma; MM, malignant melanoma; SCC, squamous cell carcinoma; Seb K, seborrhoeic keratosis.

however, a further three BCCs were also noted on the same patient's back during a full skin check by the dermatologists, one of which was large enough to warrant excision via plastic surgeons.

The BAD recommended the use of teledermatology to triage 2WW skin cancer referrals, with patients ideally having their skin lesions photographed by a GP with dermoscopic training or by a medical photographer. In our service review, there were no referrals with dermoscopic images. A Cochrane review on teledermatology referrals for skin cancer advised that the reason for referral should be clearly recorded, and that the level of training and experience of both the referring and specialist clinicians should also be clear. In our service evaluation, no provisional diagnosis was provided on referral letters from primary care to the dermatology department for 22.6% of patients. Of the total 2WW referrals, 11% of referrals came from ANPs or ACPs. It was unclear if these practitioners had adequate assessment skills for skin cancer detection.

The evaluation of our teledermatology service for patients with skin cancer during the COVID-19 pandemic identified important gaps in streamlining the 2WW pathways. Relying on patient images alone, with no F2F review in primary care, may increase the risk of missed skin cancer diagnoses. Clinical whole-body skin

examination can lead to the detection of earlier-stage melanomas as well as a reduction in disease-specific mortality. This study also highlights the need to support GPs, ACPs and ANPs by providing more training in dermatology diagnostic skills for skin cancer assessment.

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Ischaemic skin ulcers with neurofibromatosis 1 successfully treated with stent implantation

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Dear Editor,

Neurofibromatosis (NF)1 is characterized mainly by skin lesions such as café-au-lait spots, freckles and neurofibromas, and sometimes presents with abnormalities of bone, eyes and central nervous system. In up to 10% of cases, vascular lesions, including stenosis, occlusion and aneurysm, are seen. We report a case of intractable ischaemic skin ulcers of the right leg due to vascular occlusion in a patient with NF1, which was successfully treated with stent implantation.

A 28-year-old man presented with intractable skin ulcers with oedematous erythema, atrophie blanche, pigmentation and scars on his right lower thigh and upper heel, which had been present for longer than 1 month. He had been diagnosed with NF1 at the age of 10 years, based on the presence of multiple café-au-lait spots and neurofibromas on his trunk and extremities. He also had hypertension.

Laboratory examination showed increases in white blood cell count ($16.98 \times 10^9 / L$; normal range $4-11 \times 10^9 / L$) and serum C-reactive protein (41.1 mg/dL; normal < 10 mg/dL). Initially we diagnosed traumatic ulcer and cellulitis and started the patient on systemic antibiotics, but there was no clinical improvement. The ulcers expanded and new ulcers and erythema appeared on the right inguinal and popliteal regions (Fig. 1).



Figure 1 Multiple skin ulcers with erythema on the right inguinal and popliteal areas.