

Skin cancer screening via teledermatology: experience in the state of Santa Catarina

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BACKGROUND: Teledermatology provides a new tool for monitoring skin cancer, especially in countries with large surface areas and unequal distribution of population, like Brazil. Teledermatology essentially involves sending digital images to specialized cancer centers for evaluation by trained experts. Teledermatology also provides the means for discussion of the complex cases, professional training programs without necessity of transporting the patients, may lead to substantial savings of time and costs. This approach also effectively reduces the waiting times for surgical treatment and facilitates the spread of dermatological knowledge into poor regions of the world.

HYPOTHESIS: To assess the teledermatology as a method for skin cancer screening.

METHODS: One mobile unit from Barretos Cancer Hospital was used. It is composed of a medical clinic and a small operating room. The attendance was conducted in 25 cities in the state of Santa Catarina for 30 days.

These 25 cities sent a nurse to Barretos, to conduct a training course on skin cancer and teledermatology. They returned to their respective cities and for 3 months performed a screening of their local residents. The lesions were photographed and referred, via email, to Barretos Hospital team evaluate.

The Barretos Hospital team forwards a message, directing the nurse of the city to call the patient for a appointment at the mobile unit, or to reference this patient for an appointment with a general dermatologist from the city. If the picture of the lesions were with bad quality, a new picture was asked. The analyzed data were: number of total photographed patients, number of patients called to an appointment on the mobile unit, number of procedures performed (biopsies, excisions) and pathological reports.

RESULTS: Were photographed and evaluated a total of 597 patients. Of these patients, 217 were called for a medical evaluation on the mobile unit. And, of these evaluations, 180 underwent surgical procedures (resection and / or biopsy), that is 83% of patients called by teledermatology had a suspicious lesion for skin cancer.

The pathologic results confirmed 162 (90.0%) malignant lesions, 9 (5.0%) precursor lesions and 9 (5.0%) benign lesions. Among the malignant lesions, 79.5% were basal cell carcinoma, 17.5% squamous cell carcinoma and 3.0% melanoma.