Confocal laser scanning microscopy-guided surgery for neurofibroma.


ABSTRACT

The neurofibromatoses comprise at least two separate genetic disorders with variable clinical features and an unpredictable course. The most common type, neurofibromatosis 1, is characterized by ≥ 6 café-au-lait spots and the occurrence of neurofibromas, which may present as cutaneous, subcutaneous or plexiform lesions. Normally, excision of neurofibromas is only indicated in the presence of neurological symptoms, suspicion of malignancy or for exceptional cosmetic reasons. For a good functional and aesthetic result with the least danger of recurrence, the surgeon's goal is to excise as much tissue as necessary and as little tissue as possible. One of the main issues during the surgical procedure is to distinguish between neurofibroma and surrounding tissue. We report for the first time the use of confocal laser scanning microscopy to differentiate between neurofibroma and healthy skin.