



MELANOMA AND MELANOCYTIC NAEVI

EFFECTS OF GH SUPPLEMENTATION ON DERMATOSCOPIC EVOLUTION OF MELANOCYTIC NEVI IN CHILDREN

F. Panarese⁽¹⁾ - F. Giuliani⁽²⁾ - A. Mohn⁽³⁾ - G. Gualdi⁽⁴⁾ - P. Amerio⁽¹⁾

Cesi Institute, University Of Chieti-pescara, Department Of Dermatology, Chieti, Italy⁽¹⁾ - Department Of Dermatology, Ss. Annunziata Hospital, University Of Chieti-pescara, Chieti, Italy⁽²⁾ - Pediatrics Department, University Of Chieti-pescara, Chieti, Italy⁽³⁾ - Department Of Dermatology, Spedali Civili Brescia, Brescia, Italy⁽⁴⁾

Introduction: GH is a polypeptide hormone that through the GH-IGF1 system presents anabolic effects aimed to promoting cell proliferation. For this reason, many studies have focused on the possible role of this hormone in cancer development. Previous studies report the presence of GH/IGF receptors on melanoma cells suggesting a role in the initiation and tumor growth. On the other hand, few studies focus on benign melanocytic lesions and are performed mostly on patients with GH deficiency (GHD) or Turner syndrome providing conflicting results on a possible role of hormonal stimulation.

Objective: The aim of the study is to document any signs of melanocytic activation during hormonal treatment in children diagnosed with GHD.

Materials and Methods: Children diagnosed with GHD were included in the study. Personal, clinic and auxological data were collected. Dimension of the moles, dermatoscopic features and Total Dermoscopy Scores (TDS) were statistically compared before starting GH therapy and after a 6 months follow up period. Statistical correlation was performed between auxological parameters (weight, BMI and Z-score) and relative variations in moles dimension and scores.

Results: Seven children were included in the study with a total of 222 melanocytic lesions evaluated at both time points. Although statistically significant differences were found in mole dimension and TDS between the two time points, these were avoid of clinical relevance. Moreover significant correlation was found between auxological parameters and dermoscopic and dimensional features but not with serum IGF concentration before and after starting GH supplementation.

Conclusions: To our knowledge this is the first work to evaluate the effect of GH therapy on moles by using digital dermatoscopy. The results do not support a causal relation between hormone stimulation and modifying of clinical and dermoscopic features of moles. More





information will be obtained amplifying patients sample and with a longer follow-up period.

