



Keloid and hypertrophic scar distribution according to Fitzpatrick skin phototypes in Indian population – an hospital based study

Distribuição de quelóide e cicatriz hipertrófica segundo fototipos de pele de Fitzpatrick na população indiana – estudo conduzido em um hospital

SREEKAR HARINATHA¹
NITHYA RAGHUNATH²
RAVI REDDY³
ASHWIN HEBBAR⁴
SREEHARSHA HARINATHA⁵

Institution: Apollo hospitals,
Bangalore, India.

Article received: November 22, 2012.
Article accepted: November 23, 2012.

DOI: 10.5935/2177-1235.2014RBCP0057

Dear Editor-in-Chief,

We read with great interest the article "Keloid and hypertrophic scar distribution according to Fitzpatrick skin phototypes" by Hochman et al¹. The correlation between Fitzpatrick skin phototypes and distribution of keloids and hypertrophic scars gives a valuable insight into the etiopathogenesis of such lesions. Because India is a diverse nation with citizens belonging to various ethnicities it has a conglomerate of all skin phototypes. After reading the article we ventured to prospectively analyze 100 of our out-patients using the same criteria. Patients were classified according to the skin type and the nature of their scars.

Our study revealed some interesting observations (Table I). As stated by Hochman et al., Fitzpatrick III skin type shows the most common incidence of fibroproliferative scarring. The unusual resemblance of our findings with those reported by Hochman et al. might suggest the etiology of keloids and hypertrophic scars. Another interesting observation was the incidence of intermediate scars that accounted for 23% of the lesions based on the Muir criteria². This finding may come as a surprise to many practitioners who routinely classify fibroproliferative scars only into either keloid or hypertrophic scars.

India has a population of more than a billion people and constitutes a colorful canvas of unique assimilation including ethnic groups from several cultures, religions and skin types. The mere presence of such diversity of skin types represents a unique opportunity that deserves further investigation into the etiology and management options to benefit all skin types. Systematic studies in Indian skin have failed so far to establish an algorithm design for management of such lesions^{3,4}. Moreover, most studies did not classify the involved subjects by skin type. Our study should serve as a gentle reminder for researchers to record skin type on their investigation for a fruitful venture on the approach for effective management of keloids and hypertrophic scars.

1 - Dr - Consultant, Plastic, Cosmetic and Reconstructive Surgery, Apollo hospitals, Bangalore.
2 - Dr - Post-graduate registrar, Department of Dermatology, MVJ Medical college, Bangalore.
3 - Dr - Assistant Professor, VIMS, Bellary, India.
4 - Dr - Assistant Professor, Shimoga medical college, India.
5 - Dr - Post-graduate, SMS Medical college, Jaipur.

Table 1 – Frequency distribution of 100 fibroproliferative scars according to Fitzpatrick skin phototypes.

Lesion	Fitzpatrick I		Fitzpatrick II		Fitzpatrick III		Fitzpatrick IV		Fitzpatrick V		Fitzpatrick VI	
	n	%	n	%	n	%	n	%	n	%	n	%
STE		50	1	33	21	36		37	5	42	3	50
LTE	-	-	2	66	23	40	5	26	7	58	2	33
IG	1	50	-	-	14	24	7	37	-	-	1	17
Total		100	3	100	58	100	19	100	12	100	6	100

STE: Short-Term Evolution (hypertrophic scars); LTE: Long-Term Evolution (keloid scars); IG: Intermediate Group (mixed scars).

REFERENCES

- Hochman B, Farkas CB, Isoldi FC, Ferrara SF, Furtado F, Ferreira LM. Keloid and hypertrophic scar distribution according to Fitzpatrick skin phototypes, Rev Bras Cir Plást. 2012;27(2):185-9.
- Muir IF. On the nature of keloid and hypertrophic scars. Br J Plast Surg. 1990;43(1):61-9.
- Prabhu A, Sreekar H, Powar R, Uppin VM. A randomized controlled trial comparing the efficacy of intralesional 5-fluorouracil versus triamcinolone acetonide in the treatment of keloids. J Sci Soc. 2012;39:19-25.
- Meenakshi J, Jayaraman V, Ramakrishnan KM, Babu M. Keloids and hypertrophic scars: a review. Indian J Plast Surg 2005;38:175-9.

Corresponding Author:

Dr. Harinatha Sreekar

Consultant, Plastic, Cosmetic and Reconstructive surgery, Apollo hospitals, Bangalore, India.

E-mail: drsreekarh@yahoo.com