

# ORIGINAL RESEARCH PAPER

A CROSS-SECTIONAL STUDY COMPARING PREVALENCE OF HLA CW6 IN FEMALE PSORIATIC PATIENTS TO MALE PSORIATIC PATIENTS IN A TERTIARY HEALTH CENTER IN WEST BENGAL, INDIA

## **Dermatology**

**KEY WORDS:** psoriasis, genetic influence, HLA cw6, prevalence, t test.

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ABSTRACT

there is definitely a genetic influence on the occurrence of psoriasis vulgaris. HLA cw6 is found more commonly in psoriatic patients. Present study is about comparing HLA cw6 prevalence between female and male psoriatic patients. We recruit 134( with error probability 0.05% and power 95%) psoriatic patients from our skin OPD, divided them into two groups(1)female and(2)male. We did find out the incidence of HLA cw6 in two groups and compare them with chi-square test. We got that female psoriatic patients have higher rate of HLA cw6 compare to male

#### BACKGROUND:

There is no single etiology that put the person at risk of developing psoriasis. There is certain genetic influence like, HLA cw6. Presence HLA cw6 increases the risk of developing psoriasis. Present study is to see the prevalence difference of cw6 between female and male psoriatic patients.

#### PROCEDURE:

We recruit 134 psoriatic patients attending in our skin OPD. We divided them into two groups (1)female and (2) male according to sex. Thus, we have 52 female psoriatic patients while, there are 62 male psoriatic patients .We draw blood from each patients and determine the HLA types by serology. We compare the results with chi-square test.

### CONCLUSION:

We find the p value is less than 0.00001 which is significant at p<0.005. Therefore we concluded that female psoriatic patients have higher HLA cw8 prevalence than male psoriatic patients.

## REFERENCES

- Lebwohl M. Psoriasis. Lancet. 2003;361:1197–1204.
- Griffiths CEM, Camp RDR, Barker JNWN. Psoriasis. In: Burns DA, Breathnach SM, Cox NH, Griffiths CEM, editors. Rook's Textbook of Dermatology. 7th edn. Vol. 35. Oxford: Blackwell Scientific; 2004. pp. 1–35.69.
- Shelleh HH, Al-Hatiti HS. Pattern of skin diseases in a hospital in southwestern Saudi Arabia. Saudi Med J. 2004;25(4):507–10.
- Fatani MI, Abdulghani MH, Al-Afif KA. Psoriasis in the eastern Saudi Arabia. Saudi Med J. 2002;23(2):213–7.
- Nickoloff BJ, Nestle FO. Recent insights into the immuno-pathogenesis of psoriasis provide new therapeutic opportunities. J Clin Invest. 2004;113:1664-1675.
- Bowcock Anne M, Krueger James G. Getting under the skin: The immunegenetics of psoriasis. Nature reviews/Immunology volume. Sep 5, 2005.
- Rahman P, Gladman DD, Schentag C, Petronis A. Excessive paternal transmission in psoriatic arthritis. Arthritis Rheum. 1999;42:1228–31
   Elder JT, Nair RP, Guo SW, Henseler T, Christophers E, Voorhees JJ. The
- genetics of psoriasis. Arch Dermatol. 1994;130:216–24.

  9. Swanbeck G, Inerot A, Martinsson T, Wahlstrom JA. Population genetic study of of psoriasis. Br [Dermatol. 1994;131:32–39.
- of psoriasis. Br JDermatol. 1994;131:32–39.

  10. Elder JT, Nair RP, Voorhees JJ. Epidemiology and genetics of psoriasis. J Invest
- Dermatol. 1994;102:245–285.

  11 Abele DC Dobson RL Graham IB Heredity and psoriasis; study of a large
- Abele DC, Dobson RL, Graham JB. Heredity and psoriasis: study of a large family. Arch Dermatol. 1963;88:88–99.
   Swanbeck G, Inerot A, Martinsson T, Enerback C, Samuelsson L. Genetic
- Swanbeck G, Inerot A, Martinsson T, Enerback C, Samuelsson L. Genetic counseling in psoriasis: empirical data on psoriasis among first-degree relatives of 3095 psoriatic probands. Br J Dermatol. 1997;137:939–42.
- Rahman P, Elder JT. Genetic epidemiology of psoriasis and psoriatic arthritis. Ann Rheum Dis. 2005;64:37–39.
- Lander ES, Schork NJ. Genetic dissection of complex traits. Science. 1994;265:2037–2048.
- Zhang XJ, He PP, Wang ZX, Zhang J, Li YB, Wang HY, et al. Evidence for a major psoriasis susceptibility locus at 6p21 (PSORS1) and a novel candidate region at 4q31 by genome-wide scan in Chinese Hans. J Invest Dermatol. 2002;119:1361–6.
- Nair RP, Henseler T, Jenisch S, Stuart P, Bichakjian CK, Lenk W, et al. Evidence for two psoriasis susceptibility loci (HLA and 17q) and two novel candidate regions (16q and 20p) by genome-wide scan. Hum Mol Genet. 1997;6:1349-56.
- Karason A, Gudjonsson JE, Upmanyu R, Antonsdottir AA, Hauksson VB, Runasdottir EH, et al. A susceptibility gene for psoriatic arthritis maps to chromosome 16p:evidence for imprinting. Am J Hum Genet. 2003;72:125–3.
- chromosome l 6p: evidence for imprinting. Am J Hum Genet. 2003;72:125–3.

  18. Trembath RC, Lee Clough R, Rosbotham JL, Jones AB, Camp RDR, Frodsham A, et al. Identification of a major susceptibility locus on chromosome 6p and evidence for further disease loci revealed by a two stage genome-wide

- search in psoriasis. Hum Mol Genet. 1997;6:813-820.
- Mallon E, Bunce M, Savoie H, Rowe A, Newson R, Gotch F, et al. HLA-C and guttate psoriasis. Br J Dermatol. 2000;143:1177–82.
- International Psoriasis Genetics Consortium The International Psoriasis Genetics Study: assessing linkage to 14 candidate susceptibility loci in a cohort of 942 affected sib pairs. Am J Hum Genet. 2003;73:430–7
- Elder JT, Jenisch S, Wesiphal E, Henseler T, Nair RP, Stuart P, et al. Strong linkage disequilibrium localizes psoriasis susceptibility to within 0.4 Mb of HLA-C.Am J Hum Genet. 1997;61:A274.
- Mizuki N, Ando H, Kimura M, et al. Nucleotide sequence analysis of the HLA class I region spanning the 237 kb segment around the HLA-B and -C genes. Genomics. 1997;42:55–66.