FREQUENCY OF HLA B27 ANTIGEN AMONG SERONEGATIVE SPONDYLOARTHRPATHY PATIENTS IN COMPARISON WITH HEALTHY CONTROLS

OBJECTIVES:
To detect the frequency of HLA B27 Antigen among Seronegative Spondyloarthropathy patients by PCR and to assess the frequency of HLA B27 Antigen in normal population.

METHODS:
The study was conducted at the Department of Microbiology, Tirunelveli Medical College, over a period of one year from April 2016 to May 2017. A total of 100 blood samples, 50 samples from suspected Spondyloarthropathy subjects and 50 samples from normal individuals were taken. These blood samples were subjected to ESR by Westergren method, CRP by latex agglutination method and HLA B27 detection by PCR. The results were analyzed between two groups.

RESULT:
- 26% of subjects in study group were HLA B27 positive. So prevalence of HLA B27 in SpA in this region 26%. ESR was raised in 16% of subjects, CRP was positive in 20% of subjects, 12% of study subjects showed changes of SpA in X-Ray, 24% of study subjects showed evidence of SpA in MRI
- In normal population HLA B27 positivity was 0%.

CONCLUSION:
This study highlights the prevalence of HLA B27 antigen in Seronegative Spondyloarthropathy patients, strength of association is more between HLA B27 antigen and Spondyloarthropathy. Also highlights the nil prevalence of HLA B27 in normal population. HLA typing is helpful in early diagnosis of SpA before the
development of Radiological features, detected by conventional X-Ray, Computed Tomography and MRI. Detection of HLA B27 is important for institution of early treatment and to investigate for other manifestations of Spondyloarthropathy. It is also useful in screening of other family members for HLA B27. HLA typing is also important to exclude other causes of inflammatory arthritis.

**KEYWORDS:** HLA B27, Spondyloarthropathy, ESR, CRP, HLA B27 PCR.