

**TITLE : A PILOT STUDY OF SERUM GRANULYSIN IN DRUG INDUCED EXANTHEMS AND SEVERE CUTANEOUS ADVERSE REACTIONS (SCARs)**

**DEPARTMENT : DERMATOLOGY, VENEREOLOGY AND LEPROSY**

**NAME OF THE CANDIDATE : DR.JACQUINE JOSE**

**DEGREE AND SUBJECT : M.D DERMATOLOGY, VENEROLOGY AND LEPROSY**

**NAME OF THE GUIDE : DR.DINCY PETER C.V**

**OBJECTIVES :**

1. To measure serum granulysin levels and study its relationship with disease severity in patients with drug induced exanthems and severe cutaneous adverse reactions.
2. To study the clinical and cutaneous profile of patients with drug induced exanthems and severe cutaneous adverse reactions.

**METHODS :**

A prospective case-control study was conducted for a period of 19 months. Twenty two cases of maculopapular exanthema and twenty one cases of severe cutaneous adverse reactions were recruited. Twenty age-matched healthy volunteers were also enrolled as controls. Naranjo adverse drug reaction probability scale was used to determine causality. A detailed history was taken and examination was conducted. The serum granulysin was measured with Biovendor RD191327200R Human Granulysin ELISA, a sandwich-enzyme linked immunosorbent assay. The data entry was performed using Epidata software and analysis by using SPSS software. The independent sample t test was used for the comparison of normally distributed variables.

## RESULTS :

The mean age of the patients was  $44.4 \pm 14.6$  years. There was a female preponderance with M:F 0.41:1. Aromatic anticonvulsants were the most commonly implicated drug group (35.4%). Facial oedema and peripheral eosinophilia among patients with MPE and SCARs were comparable ( $p = 0.929$ ,  $>0.99$  respectively). Transaminitis was significantly more common in SCARs than MPE ( $p$  value 0.021). Dermal eosinophilia was the most common histopathological feature in CADRs (83.3%). Necrotic keratinocytes and lymphocytic exocytosis were significantly more common in SCARs than MPE ( $p = 0.01$ ,  $0.045$  respectively). There was no significant difference in serum granulysin between patients with MPE, SCARs and healthy controls. Granulysin titer was significantly higher in patients with SJS/TEN than in patients with erythema multiforme major (0.275 ng/ml vs 0.125 ng/ml,  $p$  value – 0.042).