

**Title: Clinical significance of soluble-endoglin levels in systemic lupus erythematosus: possible association with anti-phospholipid syndrome**

**Aim:** The pathogenic role of soluble endoglin (s-Eng), as an antiangiogenic protein, has largely been demonstrated in various vascular disorders. Our aim was to assess, in a cross-sectional study, plasma levels of s-Eng in systemic lupus erythematosus (SLE) patients and its relation with the disease characteristics. **Patients and methods:** Plasma from 86 patients with SLE and 36 normal healthy subjects was assayed for s-Eng levels by enzyme-linked immunosorbent assay. Demographic, clinical, autoantibodies and serological data were prospectively assessed. Disease activity was assessed by total SLE disease activity index score. **Results:** In our SLE patients, the levels of s-Eng were comparable between SLE patients and the control group. However, these levels were significantly associated with antiphospholipid syndrome (APS). In addition, s-Eng levels were significantly associated with antiphospholipid antibodies in our studied population. On the other hand, we did not find significant differences in mean plasma s-Eng levels in relation to disease activity, other organ system involvement or the presence of anti-dsDNA. **Conclusion:** Our preliminary data indicated the importance of s-Eng in a special subgroup of SLE patients associated with secondary APS. An additional prospective, large-scale, longitudinal study should be carried out to support these findings. *Lupus* (2012) 21, 1565–1570.

**Key words:** Angiogenesis; antiphospholipid syndrome; endoglin; pulmonary artery

hypertension; systemic lupus erythematosus