

## Prolactin and macroprolactin in patients with systemic lupus erythematosus

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### Abstract

**Aim:** The aim of this study was to evaluate plasma levels of prolactin and macroprolactin in a group of systemic lupus erythematosus (SLE) patients and to determine if prolactin and macroprolactin concentrations were related to disease activity, clinical features or serological abnormalities. **Methods:** Ninety consecutive Iranian patients with SLE were tested for serum prolactin and macroprolactin levels. Total prolactin was measured directly in serum samples by radioimmunoassay. Free prolactin was extracted from the serum using polyethylene glycol. Clinical manifestation and SLE disease activity index (SLEDAI) were recorded. Auto antibodies were determined by standard techniques. **Results:** There were 90 patients (۷ male, ۸۳ female) with a mean age of  $۳۷,۶ \pm ۹,۱$  (range ۱۴-۵۲). The mean disease duration was  $۳۷,۶ \pm ۹,۱$  months. The frequency of high prolactin and macroprolactin, respectively, was ۱۰% (۹/۹۰) and ۵,۶% (۵/۹۰) in patients with SLE. Macroprolactinemia was found in ۵۵,۵۵% (۵/۹) of hyperprolactinemic patients. Lupus activity was present in ۶۳,۳% (۵۷/۹۰) of patients without a significant difference in the frequency of high serum prolactin and macroprolactin levels when compared to inactive lupus. There were no statistically significant differences regarding demographic, clinical and laboratory characteristics between the group of patients with macroprolactinemia and the group without macroprolactinemia. **Conclusion:** Our results suggest that a subgroup of SLE patients have hyperprolactinemia and macroprolactinemia but they do not seem to have positive or negative correlation to clinical and laboratory features and disease activity. © 2008 Asia Pacific League of Associations for Rheumatology.

### Reaxys Database Information

### Author keywords

Lupus; Macroprolactin; Prolactin

### Indexed Keywords

**EMTREE drug terms:** antimalarial agent; antinuclear antibody; autoantibody; double stranded DNA antibody; macrogol; prednisolone; prolactin

**EMTREE medical terms:** adolescent; adult; antibody detection; article; blood sampling; clinical feature; controlled study; demography; disease activity; disease duration; enzyme linked immunosorbent assay; female; human; hyperprolactinemia; Iran; major clinical study; male; priority journal; prolactin blood level; radioimmunoassay; systemic lupus erythematosus

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