duration of the disease (regarding both LP and psoriasis), history of treatments (for both diseases), also full examination, including dermatological examination, were done for all patients by the same dermatologist. Some patients needed full biochemical investigations according to the clinical variants of the two dermatoses and some of them needed skin biopsy to settle the diagnosis.

Methods of determination of serum selenium:

A (5 ml) sample of blood were taken from all study subjects and allowed to clot then centrifuged at 3000 rpm for 5 minutes. The clear serum was transferred to a plastic tube by disposable syringe and tapped by a plastic stopper, then stored a deep frozen at -20 °C before analysis (all glassware and bottles used for the isolation of serum and for analysis were previously soaked in diluted nitric acid (10%) and rinsed thoroughly with de-ionized water, this procedure was followed in order to exclude the possibility of contamination with trace elements). Serum was aliquoted into a vessel-tube for mineralization with 5 ml of HNO_3/$HCLO_4$ (4:1 v/v). The temperature of this mixture was slowly increased to 175 °C until fumes of $HCLO_4$ appeared. The mixture was then heated according to the following (temperature/time) scheme: 175 °C/60 min, 200 °C/60 min and finally 250 °C for 60 min. The mixture was then left to cool down to room temperature. HCL 6 N (10 ml) was added and heated to 170 °C for 30 min to reduce the Se (VI) to Se (IV). After cooling to room temperature, Se concentration was determined using the hydride generation atomic absorption spectrophotometry (Atomic absorption spectrophotometer Shimadzu, AA-680). Sodium bromohydride solution (3 g $NaBH_4$, 1 g NaOH in 100 ml of mili-Q water) was used as a reducing agent. Samples were diluted (1:4) with de-ionized water and measured directly at 196 nm. A standard curve was made from dilutions solution of 1 mg/ml [(15)].

Statistical analysis

Continuous variables were expressed as mean and standard deviation. Categorical variables were expressed as percentages. Descriptive characteristics of patients were compared using $\chi 2$ tests with Yate's correction for continuity. All database management and statistical analyses were performed with SPSS software (10^{th} version). The level of significance was set at (*p*-value < 0.05). All probability values were two-sided [(16)].

Results

Duration of LP in group 1 patients was between one month & 5 years while the duration of psoriasis in group 2 patients was between two weeks & 15 years.

Selenium level shown to be decreased in 20 (50%) patients of the 1^{st} group (patients with LP), in 32 (80%) patients of the 2^{nd} group (patients with psoriasis) and 14 (35%) of the 3^{rd} group (control), (selenium level was between 40 and 70 µg/l in those patients and was 80 µg/l and more in patients with normal selenium levels) and the results were of high statistical significance when compare between groups 2 and 3 but it was insignificant when compare between groups 1 and 3 (Table 2 and Figure 1).

Selenium level was decreased in 12 of the 1st GP Patients who had LP for two years and above, while it decreased in 18 of the 2nd GP Patients who had psoriasis for two years and above, also selenium level decreased in patients with severe and diffuse variants of both LP and psoriasis (eruptive, ulcerative and diffuse lichen planus as well as