Pentoxifylline and Local Honey for Radiation-Induced Burn Following Breast Conservative Surgery.

Abstract

INTRODUCTION: Breast-conserving therapy is currently the standard of management of breast cancer cases. Radiotherapy is an integral part of it; however, it has several complications. Radiation induced burn is a common complication of radiotherapy that requires more effective lines of management rather than the classically used ones. We investigated whether the addition of pentoxifylline (PTX) alone or in combination with topical honey is effective in its management compared to the standard measures.

METHODS AND MATERIALS: In this prospective study, patients were randomly allocated into three groups each of 50 cases. Group A received standard burn treatment (control group). Group B received additionally 400 mg PTX twice daily. Group C received the same treatment as Group B with adding topical purified honey ointment. Patients were assessed initially and subsequently after 4 and 12 weeks, for projected coetaneous surface area (PCSA) of burn, pain severity, limitation of movement and exudation.

RESULTS: There was a striking regression of the mean PCSAs of lesions among groups B and C at 12 weeks, with reduction rates (8661±61 %) and (7658±58 %) respectively (p

CONCLUSION: Combination of PTX and honey is an ideal measure for treatment of radiation-induced burn following breast conservative surgery.

Pretreatment serum interferon-gamma-inducible protein (IP-10) levels predict the response to treatment in Egyptian patients infected with HCV genotype 4A

Background and Aims: Egypt has a high prevalence of hepatitis C virus (HCV) and a high morbidity and mortality from chronic liver disease, cirrhosis, and hepatocellular carcinoma. The most prevalent Genotype is 4a, which responds less successfully to treatment. We investigated associations between serum Interferon- inducible protein (IP-10) and liver histological features, viral load and treatment outcome among patients infected with HCV genotype 4a.

Methods: Subjects were 40 chronic genotype 4a-infected patients (Group A), 20 patients having positive HCV antibodies but with undetectable HCV RNA (Group B), and finally 20 healthy subjects as control group (Group C). Serum IP-10 levels in three groups were measured by a solid phase sandwich enzyme linked immunosorbent assay. For group A, HCV genotyping (LiPA), viral load estimation (RT-PCR), liver biopsies and histological examination were carried out according to Metavir score. Then, they receive standard doses of pegylated interferon alpha 2a and
ribavirin (800â€“1200mg) for 48 weeks after complete workup in tropical medicine unit â€“ Mansoura university hospital.

Results: Serum IP-10 levels were higher among the first group than the other groups. (P< 0.001). Furthermore, positive correlation exist between serum IP-10 levels and both viral load and liver fibrosis grade, respectively (r = 0.87, P< 0.001 and r = 0.6, P< 0.001).

Among group A, Sustained virological response (SVR) (16/40) were significantly associated with lower baseline IP-10 levels (P< 0.001).

We proposed cutoff value healthy controls, for predicting SVR. By using univariate regression analyses for studying the relation between different parameters and SVR, OR (95% CI) for baseline serum IP-10 level viral load it was found that the values were 5.25 (2.11â€“13.09), 1.93 (0.91â€“4.11), 1.88 (0.95â€“3.71) and 1.83 (0.99â€“3.39), respectively. While, in multivariate logistic regression analyses, IP-10 value was independently predictive of SVR. When using the same cutoff for predicting SVR, it yielded sensitivity and specificity, NPV and PPV of 87.5%, 83.3%, 77.8% and 90.9% respectively.

Conclusion: Pretreatment serum IP-10 levels predict the response to treatment in patients infected with HCV genotype 4a.