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The effects of allopurinol and normal saline mouthwashes in the prevention of chemotherapy-induced stomatitis

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Objectives: Oral Mucositis (OM) or Stomatitis is a significant medical and nursing problem and a common side effect of chemotherapy. OM is associated with pain, reduced oral intake, higher incidence of infections and prolonged hospitalization and treatment. In this study, the efficacy of two protocols for oral care using either allopurinol or as normal saline oral rinses was compared in view point of preventing mucositis in patients undergoing chemotherapy. **Methods:** 69 patients were randomized to receive either allopurinol (n=28), normal saline (n=27) or water (14) for prevention of Oral Mucositis. With starting of chemotherapy, allopurinol and normal saline groups used their mouthwashes for 16 days and control group was advised to use water for washing their mouth. **Results:** The results showed that intensity of stomatitis and related pain were decreased significantly as well as their maintenance in allopurinol group in comparison with other groups ($P < 0.05$). Also it was showed that the differences between normal saline and control groups was significant ($P < 0.05$). **Conclusion:** It can be concluded that using allopurinol mouthwash could decrease the occurrence and intensity of stomatitis. Then using allopurinol mouthwash for the prevention of stomatitis during chemotherapy was advised.

Key words: Chemotherapy, Chemotherapy-induced stomatitis, Allopurinol mouthwash, Normal saline mouthwash.

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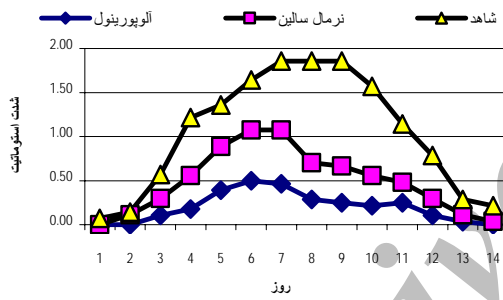
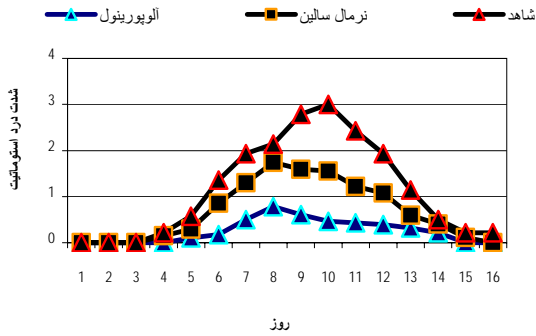
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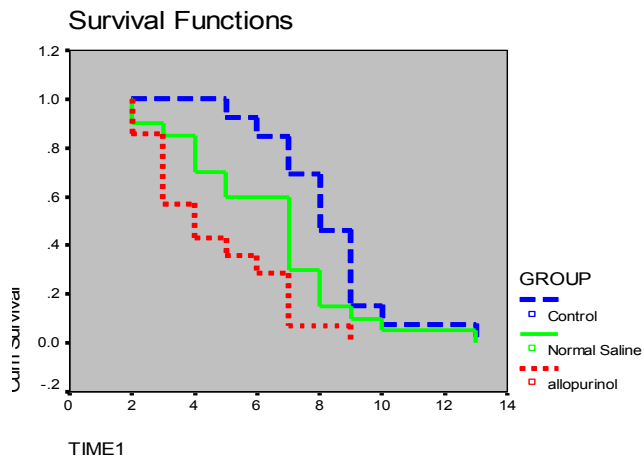
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