

RENAL MANIFESTATIONS OF ERYTHEMA MULTIFORME

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BACKGROUND. Erythema multiforme (EM) can be divided into EM minor, Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN). SJS is a drug-induced reaction and TEN is a more severe form of SJS. We observed a few cases of SJS/TEN develop renal abnormalities such as acute renal failure (ARF) and hypokalemia. So we conducted a retrospective study to find out the renal manifestations of EM.

METHODS. From medical records, we evaluated patients who fulfilled the criteria of EM minor, SJS, TEN from January 2002 to June 2005. Fifty cases were drug-related and 52 were infection-related.

RESULTS. Among the 50 patients with drug-related EM, 4, 22 and 24 of them were TEN, SJS and EM minor, respectively. And 18, 10, 5 and 5 of them were related to the use of carbamazepine, NSAID, allopurinol and antibiotics, respectively. Among the 52 patients with infection-related EM, 2 and 50 of them were SJS and EM minor, respectively. There was a higher incidence of elevated estimated creatinine clearance (<60 mL/min) in the non-carbamazepine drug-related EM than in the infection-related EM at initial hospitalization (36% vs 11%; $p<0.05$). The incidence of hyponatremia is higher in the carbamazepine-related EM than the infection-related EM (41% vs 12%; $p<0.05$). The incidence of development of ARF was higher in the allopurinol and NSAID-related EM than in EM related to other drugs (60% vs 30% vs 0%).

CONCLUSION. Allopurinol and NSAID-related EM are associated with higher incidence of ARF than other drugs or infection-related EM. TEN are associated with higher incidence of ARF and tubular dysfunction. However, a larger study is needed to clarify the impact of EM on the kidney.

Keywords: erythema multiforme, allopurinol, acute renal failure