Allopurinol-induced severe cutaneous adverse reactions

In their article entitled 'Insights into the poor prognosis of allopurinol-induced severe cutaneous adverse reactions: the impact of renal insufficiency, high plasma levels of oxypurinol and granulysin',¹ Chung and colleagues elegantly investigated the factors associated with severe cutaneous adverse reactions (SCAR) in patients taking allopurinol as antihyperuricaemic agent and found that impaired renal function and increased plasma levels of oxypurinol and granulysin correlated with the poor prognosis of allopurinol SCAR. In their results section, the authors stated that they did not find any difference in patients with renal impairment in the values of initial dose/estimated glomerular filtration rate (eGFR) between allopurinol SCAR and tolerant controls. This result seems in contrast to what reported by Stamp *et al*² because these authors found that there was an increase in the risk of allopurinol SCAR as the starting dose of allopurinol corrected for the estimated GFR increased. The main difference between these two studies is that the mean baseline eGFR was frankly lower in the cohort studied by Chung (34 mL/min/1.73 m²) compared with the cohort studied by Stamp (50.2 mL/min/1.73 m²). In both studies, the Modification Diet Renal Disease (MDRD) study equation was used to calculate eGFR. Two important questions should then be answered. (1) Is the initial dose/eGFR negligible in terms of risk of SCAR in patients with more severe renal impairment? (2) Was the group of patients studied by Chung dialysis-free? Unfortunately in the text it is not specified whether the patients were dialysis-free and as plasma oxypurinol concentrations are reduced by 50% by dialysis,³ this could be of great importance in the final results.

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