Illicit Herbal Preparation Containing Phenylbutazone Causing Analgesic Nephropathy

M.		Segasothy
S.		Samad

Departments of Medicine and Radiology, University Kebangsaan Malaysia, Kuala Lumpur, Malaysia

M. Segasothy, Department of Medicine, University Kebangsaan Malaysia, Jalan Raja Muda, Kuala Lumpur 50300 (Malaysia)

Dear Sir,

Analgesic nephropathy has most commonly been attributed to the excessive consumption of analgesic compounds commonly containing aspirin, phenacetin and caffeine. Occasional examples of renal papillary necrosis with individual analgesics such as aspirin, indomethacin or phenylbutazone have been described but these are uncommon because individual analgesics are rarely addictive [1]. We report a case of analgesic nephropathy due to the consumption of illicit traditional herbal preparation containing phenylbutazone.

A 73-year-old female presented with epigastric pain of 6 months' duration. She had osteoarthritis of both knees for which she had been consuming 2 tablets of traditional herbal preparation daily for the past 10 years, giving a total of about 7,300 tablets. She denied the consumption of other analgesics. She had had no past history of diabetes, hypertension or tuberculosis. Investigations showed hemoglobin 8.6 g/dl, urea 20.9 mmol/l, creatinine 183 mmol/l and uric acid 383 mmol/l. Urinalysis showed trace of protein, leukocytes 25.106/l, no red cells, epithelial cells or casts and no organisms on culture. Intravenous urogram showed bilateral papillary necrosis (fig. 1). Gastrosocopy revealed a gastric ulcer. Analysis of the herbal preparation revealed the presence of 120 mg of phenylbutazone and traces of dexamethasone. Phenylbutazone was analyzed using a gas chromatograph mass selective detector method [2].

Many patients in Malaysia consume traditional herbal preparations which are freely available from Chinese medical halls for various forms of arthritis including osteoarthritis, rheumatoid arthritis and gouty arthritis and for chronic backache. The product inserts of these preparations stipulate only Chinese herbs as their active

1 We would like to thank J. Maharam of the Chemistry Department of Malaysia for having analyzed the herbal preparation.

Fig. 1. Intravenous urogram showing bilateral papillary necrosis. Contrast collections are seen in some of the papillary areas due to sloughing of the necrosed papillae.

ingredients. Recently it has been shown that many of these preparations contain phenylbutazone [2]. 30 illicit preparations were seized from Chinese medical halls and were analyzed for phenylbutazone using a gas chromatograph mass selective detector method [2]. Of the 30 anti-rheumatic drugs analyzed, 25 were found to contain amounts of phenylbutazone ranging from 0.6 to 198 mg per capsule (or pill). The manufacturers of these herbal preparations added the phenylbutazone presumably because of its potent analgesic and antiinflammatory properties. Herbal Preparation Causing Analgesic Nephropathy

Renal papillary necrosis had been documented by intravenous urogram in this patient who had consumed excessive amounts of traditional herbal preparation (7,300 tablets). On analysis, this preparation was found to contain 120 mg of phenylbutazone. Hence this patient had consumed a cumulative amount of about 900 g of phenylbutazone. This patient denied consuming other analgesics. It is thus possible that the renal papillary necrosis was caused by the phenylbutazone present in the herbal preparation.

This case report serves to draw attention to the possibility that illicit traditional herbal preparations that are consumed for arthritis and chronic backache can lead to analgesic nephropathy. Thus in patients in whom analgesic nephropathy has been documented but who insist on having consumed only traditional herbal or other nonanalgesic preparations it would be useful to analyze the preparations for the presence of phenylbutazone and or other analgesics.

References

Nanra RS: Clinical and pathological aspects of analgesic nephropathy. *Br J Clin Pharmacol* 1980;10:359–368. Chang ET, Lim BH: A case study of illicit preparation of anti-rheumatic analgesic with phenylbutazone as active ingredient. *Med J Malaysia* 1989;44:160–166.