

# SHORT COMMUNICATION: FURTHER EVIDENCE OF ANALGESIC NEPHROPATHY IN MALAYSIA

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## SUMMARY

*In a prospective study performed on patients admitted to the medical and renal wards of General Hospital, Kuala Lumpur, over a period of 14 months from January 1982, we documented 12 new cases of analgesic nephropathy (AN).<sup>1</sup> Since then up to July 1986, we have documented a further 16 cases of AN giving a total of 28 cases over a four-and-a-half-year period.*

## METHODS AND PATIENTS, RESULTS

The subjects and methods are as described previously.<sup>1</sup> From January 1982 to July 1986, 105 patients were found to have been taking analgesics regularly (less than 1 kg). We managed to perform the relevant investigations including intravenous urograms (IVUs) in only 86 patients,

as the others were either lost to follow-up or had refused to have IVUs done on them. Twenty-eight of these patients had radiological evidence of renal papillary necrosis.

In consistent with the previous study,<sup>1</sup> there is a preponderance of males with the male to female ratio being about 3:1 (Table I). This is, however, contrary to the experience in the West and in Australia.<sup>2</sup> Similar to the experience in the West and in Australia,<sup>2</sup> many of the patients are in the middle and older age groups (Table I), although nine patients (35%) are under the 40-year age group. All the three major races have AN (Malays 16; Chinese nine; and Indians three.)

TABLE I  
RACE, SEX\* AND AGE DISTRIBUTION OF PATIENTS  
WITH ANALGESIC NEPHROPATHY

Ages (yrs.)	Malay		Indian		Chinese		Total
	M	F	M	F	M	F	
21-30	2	-	-	-	-	-	2
31-40	4	-	1	1	1	-	7
41-50	2	1	-	-	-	1	4
51-60	2	2	-	-	3	-	7
61-70	3	-	1	-	2	-	6
71-80	-	-	-	-	-	2	2
Total	13	3	2	1	6	3	28

\*M = male; F = female.

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The type and quantity of analgesics consumed are listed (Table II). The commonest cause for analgesic consumption is headache (11 patients) followed by gouty arthritis (seven patients), rheumatoid arthritis (three patients), osteoarthritis (three patients), backache (three patients) and loin pain (two patients). Three patients denied analgesic abuse.

These patients also had the other features of AN including gastrointestinal manifestations such as symptoms of peptic ulceration (35%), ischaemic heart disease (14%), anaemia (35%) and psychological and psychiatric manifestations such as anxiety neurosis, depression, suicidal tendency and inadequate personality (8%). One patient had been abusing laxatives, two patients had been drinking alcohol regularly and 14 patients (54%) are chronic smokers. None of our AN patients had been abusing psychotropic drugs or sleeping tablets. None of our AN patients appeared prematurely aged.

Eight patients had normal renal function, 17 patients had mild to moderate renal impairment and three patients had severe renal impairment at initial presentation. Since then, five of these patients had progressed to end-stage renal failure of which two are on regular haemodialysis therapy.

## DISCUSSION

We have documented 28 cases of AN confirming our earlier view that AN does exist in Malaysia.<sup>1</sup> It is important to note that five of these cases have progressed to end-stage renal failure. Whilst it has been the experience in Australia that with better public awareness on the consequences of analgesic abuse and legislation to prevent under-counter sales of compound analgesics, there is a suggestion that the incidence of AN may be on the decrease,<sup>3</sup> we feel that in Malaysia it will increase in the future unless similar preventive measures are instituted.

TABLE II  
TYPE AND AMOUNT OF ANALGESICS CONSUMED BY PATIENTS  
WITH ANALGESIC NEPHROPATHY

Analgesics consumed			No. of Patients
Type	Amount		
Paracetamol	1.0 – 15.3 kg		7
<i>Chap Kaki Tiga</i> (CKT)*	13.6, 24.4 kg		2
<i>Chap Harimau</i> (CH)*	0.6 kg		1
APC*	2.2, 3.9 kg		2
Combination: Paracetamol + CH	0.7 – 29.4 kg		4
Paracetamol + CKT	1.6 kg		1
Unidentified	excessive		5
NSAID** : Indomethacin	2,800 capsules		1
Mefenamic Acid	1,000 capsules		1
Multiple types	excessive		1
Denied analgesic intake	–		3

\* compound analgesics containing aspirin, phenacetin and caffeine.

\*\* non-steroidal anti-inflammatory agents.

Paracetamol is the most commonly consumed analgesic in Malaysia<sup>4</sup> and it is of significance to note that seven patients had consumed only paracetamol and another five patients had consumed paracetamol in combination with other analgesics. One of these patients is already on regular haemodialysis therapy for end-stage renal failure. Hence we anticipate that paracetamol may assume an increasingly important role in the causation of AN in view of its increasing consumption.<sup>5</sup>

In three patients, the cause of AN is attributed to non-steroidal anti-inflammatory agents, namely indomethacin and mefenamic acid (ponstan). Whilst indomethacin has been known to cause occasional cases of AN, mefenamic acid has not been reported to cause AN. Therefore, we recommend that these drugs be used more judiciously and patients on long-term use of these drugs be regularly monitored for their renal function.

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