ALLOPURINOL INDUCED DIABETES MELLITUS?

Sir,

We read with interest the letter by Gibson attributing the development of diabetes mellitus to taking allopurinol 300 mgs a day for six months.[1] Hyperglycemia and diabetes mellitus are not listed as side-effects of allopurinol in the latest edition of *Martindale*.[2] A Boston Collaborative Drug Surveillance Program of 29,524 hospitalised patients revealed that, with the exception of skin reactions, of 1,835 patients treated with allopurinol, 33 (1·8%) experienced side-effects, but hyperglycemia and diabetes were not observed.[3] Another study of 1,748 outpatients taking allopurinol did not show diabetes as an adverse effect.[4]

Serious toxicity to allopurinol (allopurinol hypersensitivity syndrome (AHS)) is rare, but it is seen most often in patients also taking thiazide diuretics, and in patients with renal impairment.[5] The development of diabetes mellitus type 1 has only been reported once in association with AHS; the pathogenesis is not clear, and an immune mediated mechanism has been proposed.[6]

The administration of a thiazide diuretic can exacerbate insulin resistance,[7] and it may also be that allopurinol interacts with thiazides resulting in an increased incidence of reactions to thiazides.[5] Such a speculative drug-to-drug interaction is similar to the reported increase in the incidence of allergic reactions to penicillin with concomitant allopurinol administration.[8]

In those patients who are on allopurinol treatment an angiotensin converting enzyme inhibitor or α-adrenergic antagonist such as doxazosin may be used instead of bendrofluazide to improve insulin sensitivity.[7]

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BRONCHOSCOPIC ELECTROCAUTERY AND HISTOLOGICAL YIELD FOLLOWING ENDOBRONCHIAL BIOPSY IN LUNG CANCER

Sir,

Fibreoptic bronchoscopy is often helpful in the diagnosis of lung cancer with a tissue diagnosis often achieved by endobronchial biopsy of visible tumour. The BTS guidelines on flexible bronchoscopy recommend a diagnosis rate of at least 80% when there is visible endobronchial tumour.[1] The diagnostic yield for malignancy from biopsy in the presence of suggestive findings has been reported as 82% in a recent study.[2] Clinically significant (greater than 50 mls) bleeding occurred in 1·9% of biopsies in one large review of bronchoscopies, 29% of these following endobronchial biopsy. Profuse bleeding (greater than 100 mls) occurred in 0·4% of biopsies, 25% of these following endobronchial biopsy.[3] More vascular tumours are associated with higher incidence and severity of bleeding, and the quoted risks of bleeding in the above studies would be expected to be higher following biopsy of larger and more vascular tumours. Once significant bleeding during endoscopy occurs, it can be difficult to take further biopsies and control the site of bleeding.

Electrocautery uses alternating current at high frequency to generate heat to coagulate, vaporise or cut tissue depending on the power;[4] its use is established in colonoscopic 'hot biopsy', and palliation of upper airway obstruction or haemoptysis at bronchoscopy.[5]

We used electrocautery in a case series of 34 patients over 12 months with endobronchial tumours with more vascular appearance which might have been predicted to bleed more than others following biopsy. Electrocautery was applied in a controlled fashion prior to biopsy without obliterating the tissue integrity but sufficient to be more confident of haemostasis after biopsy.

No significant bleeding occurred and there were no major complications relating to the use of electrocautery. The diagnostic yield was 88·2% which compared favourably with our unit's histological yield (unpublished observations) without electrocautery in the presence of tumour. This technique may be particularly helpful when trying to biopsy more vascular tumours by minimising bleeding while not adversely affecting yield (at least one major bleed requiring ITU

admission had occurred in our unit following a brush biopsy, unpublished observations). A controlled prospective study would enable assessment of the size of benefit in reduction of haemorrhage.

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INTERMITTENT WOLFE PARKINSON WHITE SYNDROME

Sir,

I would like to share an experience regarding a patient whom I saw about three weeks ago. The patient was a woman from Bangladesh, aged 40, who complained of episodic palpitation with sweating and dizziness. She was hypothyroid receiving thyroxine replacement. Clinical examination was unremarkable but a resting electrocardiogram (ECG) showed that she had Wolfe Parkinson White Syndrome. Serum levels of T3, T4, TSH being normal, I requested a 24 hour Holter suspecting paroxysmal supraventricular tachycardia (PSVT). The Holter report was unusual and interesting: it showed that 13% of all beats were aberrantly conducted while the remaining 87% were normally conducted beats with normal PR interval (Figure 1).

Remarkably a resting ECG done in Bangladesh three months previously did not show any evidence of Wolfe Parkinson White Syndrome. This is my first experience with what may be termed as 'intermittent Wolfe Parkinson White Syndrome' and I would like to know of any other reader's experience regarding this condition.

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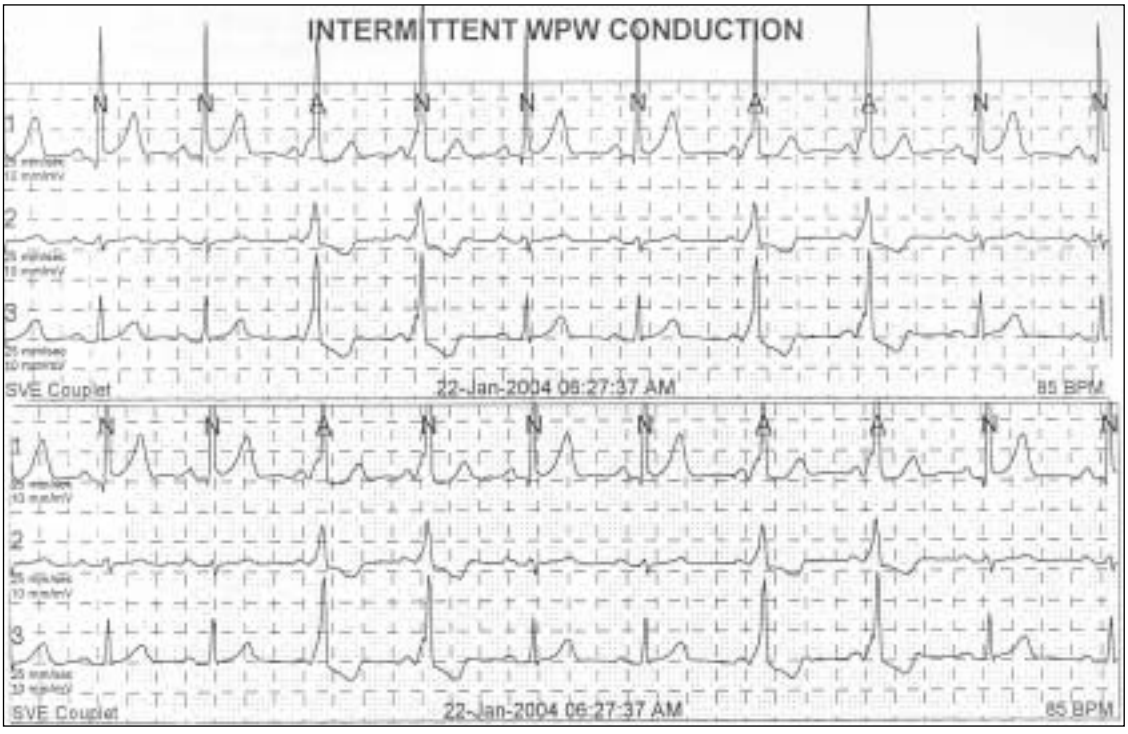

FIGURE 1
Intermittent Wolfe Parkinson White syndrome.
Note: A = aberrantly conducted beat (WPW syndrome) N= normally conducted beat.

RE: DELIVERING THE NATIONAL SERVICE FRAMEWORK FOR CORONARY HEART DISEASE[1]

Sir,

The statistics showing a progressive improvement in 'door to needle time' (Figure 4, page 19)[1] would be highly commendable. However they take no recognition of the fact that the National Service Framework (NSF) guidelines do not even make a pretence of an attempt to 'capture' the 'lost tribe' of myocardial infarct (MI) patients who have, by default, lost their entitlement to thrombolytic therapy. There are those who have a pain-free clinical presentation, notwithstanding an association with electrocardiographic (ECG) as well as 'time frame' criteria for thrombolysis.[2] In some of these cases, in particular those who present with collapse or new onset left ventricular failure (LVF), the clinical onset is sufficiently dramatic to be a surrogate for the conventional chest pain presentation. What remains is merely to document the time it takes for that patient to arrive at the 'front door' where the decision will be taken whether or not to thrombolyse. In one study as many as 33% of 434,877 patients with confirmed MI had a pain-free presentation. Denial of thrombolytic therapy condemns such patients not only to an increased risk of 30-day mortality but also to an increase in the long-term risk of heart failure. Therefore, before we become too complacent, we should compare members of the 'lost tribe' with counterparts who were thrombolysed on the basis of conventional chest pain presentation. The comparison should ideally be prospective but a retrospective comparison might also yield valuable insights. The two groups should be matched not only for age and sex, but also for ECG-based thrombolytic criteria and for the interval between onset of MI related symptoms (namely, chest pain or its surrogates, i.e. collapse or LVF) and arrival in hospital. The end-points would be 30 day mortality and late-onset heart failure. It would be interesting to see how high-risk groups such as diabetics and patients with left bundle branch block fare in such a comparison.

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