a large number of these smaller components to form sensible combinations or patterns. This process of breaking down sound waveforms and reformulating into combination of nerve signals, allows the brain to distinguish the different frequencies of sound which form the individual notes, different pitches in music, music combinations (harmonics) or noise.

LOK YAP Consultant Physician Whittington Hospital, London

References

- 1 Williams LP. *Michael Faraday: a biography*. New York: Basic Books, 1965.
- 2 Domb C. James Clerk-Maxwell: 100 years later. *Nature* 1979;282:235–9.
- 3 Bracewell RN. The Fourier transform. Sci Amer 1989:86:90.
- 4 Artificial neural network. http://en.wikipedia.org/wiki/Artificial_ neural_network

Misuse of 'toxin'

The helpful article by Thanacoody and Waring on toxic effects on the cardio-vascular system mistakenly described the substances involved as 'toxins' (*Clin Med* February 2008 pp 92–5).

For more than a century that term has been applied only to complex substances, almost always of biological, origin form plants, micro-organisms etc, and not to simple organic chemicals of the type discussed in that paper. The distinction is recognised in standard 'British' and 'American' English dictionaries, eg the Oxford English and Webster's dictionaries, in specialised dictionaries, such as Dorland's and Mosby's, and in the titles of many journals and monographs.

The specific term 'toxin' is valuable because it immediately alerts the reader to the general nature of the chemicals being considered and the likelihood of special features of their origins, properties and effects. The simpler, organic substances may be called 'toxic chemicals' as there is no single equivalent word other than the less familiar 'toxicant'.

Please let us maintain a helpful linguistic distinction in English and one that is also mirrored in many other languages.

ANTHONY D DAYAN Retired Professor of Toxicology, London

Clinical & Scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

A new differential for pyrexia of unknown origin?

I was recently involved in the care of a patient under investigation for pyrexia of unknown origin. He suffered from isolated spikes in temperature every evening and occasionally in the morning. During a ward round I noticed that an infrared ear thermometer was being used to take his temperature immediately after he removed headphones connected to his bedside television. On further questioning the patient reported that he had been using his headphones very frequently and he was often asked to remove them to have his temperature recorded. Having obtained the instruction leaflet for the thermometer I discovered that headphones should be removed a least 20 minutes before use. Could this be a new addition to the differential for pyrexia of unknown origin? If this is the case then a large number of admissions may have been unnecessarily prolonged.

CHRISTOPHER COYLE
Foundation Year 2 (general medicine)
Luton and Dunstable Hospital

Poor communication: 'hot' dictation rather than pro formas?

The consultant post-take ward round (PTWR) is a critical time for reviewing the relevant history, examination and investigations and planning further investigation and treatment. Poor documentation is common and limits the benefits of consultant decisions on patient care. Pro formas have been proposed as a possible solution to this.

In support of this, a PTWR pro forma introduced locally in 2003 significantly improved PTWR documentation in four key areas: differential diagnosis, management plan, deep vein thrombosis (DVT) prophylaxis, and resuscitation status. Pro formas, however, are not long lasting. Ho *et al* noted an initial improvement in surgical records by a clerking pro forma which had significantly declined only three years later.²

In 2007, PTWR pro forma documentation was reassessed (having anticipated that completion was poor) with added stringency of a PTWR consultant countersignature (in the hope this would improve completion). In the study, 75 clinical records were examined. Quality of the PTWR documentation was assessed for the same criteria used in the 2003 study (Table 1). Three additional assessed parameters included clerking doctor bleep number and rank, and PTWR consultant countersignature.

The results from 2007 are shown in Table 1 (Fishers exact test, Graph Pad Prism version 4). Only 72 of the 75 examined records had a documented PTWR. There was a significant decline in three parameters (patient name, clerking doctor name and blood results). A less significant decline was observed in four other parameters (consultant name, differential diagnosis, management plan and electrocardiogram results). Significant improvements were noted in only two parameters (hospital number and DVT prophylaxis). Other parameters were unchanged. The supplementary parameters (bleep number, rank and consultant countersignature) were present in low proportions (33, 29 and 12% respectively).

These results have obvious serious implications on patient care. Although not measured in this audit, it is likely that similar problems in communication to primary care on the discharge papers occur for the same reasons. This increases the chance of hospital readmission as the general practitioner (GP) is unable to access sufficient information about recent admission.

This study confirms that the previous benefits of a PTWR pro forma on standards of documentation decline over four years despite the implementation of a consultant countersignature. Maintaining high quality clinical documentation remains