



Free antiretroviral treatment is not without cost to the patient

Rosen *et al.* (p. 524) conducted a longitudinal study among recipients of free antiretroviral treatment (ART) at clinics and other facilities in Gauteng and Mpumalanga to estimate the cost that patients incur in obtaining this treatment. Patients must visit the health facility at least 9 times a year for treatment, and the researchers found the average out-of-pocket cost per visit to be R96 (about US\$13) across the entire sample, plus travel and waiting time.

Much of the cost was attributable to transport, clinic fees, payment of substitute labour, income loss, purchase of special foods and medicines, and caretaker time. There was striking variation within the sample, however, with 5% reporting no cost, and a relatively small proportion of respondents incurring disproportionately high expenditure. Nevertheless, the authors speculate (something not specifically explored in the study) that 'the cost incurred even by the 25% of subjects who spent the least makes it likely that cost is deterring many eligible patients from enrolling or remaining in treatment programmes'.

Diagnosis of TB in HIV – 'educated guess' when smear is negative

Pulmonary tuberculosis (PTB) is the commonest cause of morbidity in HIV-infected individuals. Indeed at autopsy, half the patients dying from HIV are found also to be infected with TB, and half of these were not diagnosed *ante mortem*. As a rule, the disease tends to be rapidly progressive, leading to early death. Yet the sputum in such patients is twice as likely to be smear-negative, resulting in management dilemmas. Sputum culture, a more sensitive test, takes at least 8 weeks to yield results. For this reason, clinico-radiological algorithms have been devised to permit an early presumptive diagnosis and initiation of therapy pending the outcome of sputum cultures.

Saranchuk and colleagues (p. 517) conducted a prospective study to validate one such algorithm in Khayelitsha, Cape Town. Essentially, patients with deteriorating function who were unresponsive to antibiotics, and whose radiographs were consistent with PTB, were provisionally presumed to have active PTB infection, and put on treatment. Meanwhile, cultures of sputum, pleural effusion or lymph node aspirate were obtained.

Culture results confirmed the diagnosis of TB in 55.2% of the cases. However, a further 36% whose cultures were negative were nonetheless regarded by the authors as 'probable' or 'possible' active TB cases and continued on treatment. All in all, 91% of patients commenced on empirical TB treatment based on clinico-radiological diagnosis showed a (positive) response to therapy' irrespective of the subsequent culture results. The take-home lesson from this study would therefore seem to be: in a public clinic situated in a setting similar to Khayelitsha,

if an HIV-positive patient looks like they have PTB, and the radiological picture is compatible with tuberculosis, they are more than likely to improve on empirical treatment, and the patient will benefit from the prompt initiation and continuation of standard TB treatment irrespective of the results of the culture (exclusive of those with proven MDR TB, of course).

Powdered infant feeds prone to microbial contamination during in-hospital preparation

Marino *et al.* (p. 534) investigated the potential for microbial contamination during the in-hospital preparation of powdered infant feed (PIF), and found that there was significant contamination even when preparation occurred in a controlled environment, in essence confirming what has been demonstrated in 'a significant body of international data'.

The current study found that 30% of PIFs studied, including those that were newly prepared, were heavily contaminated with bacteria. Opportunities for contamination arise during mixing and addition of additives, and when prepared food is allowed to stand in the milk kitchen or the ward. There are specific recommendations for handling PIFs, including appropriate water temperature at reconstitution, cooling, transportation to the ward in a refrigerated trolley, and storage in an industrial fridge at 4°C. In most settings these are either not feasible or not followed even in the best-equipped hospitals. The authors recommend the replacement of PIFs with pre-packaged ready-to-use infant feeds, which the authors consider to be sterile and safer.

Non-steroidal anti-inflammatories? Think embolic event!

The widely used non-steroidal anti-inflammatory drugs (NSAIDs), many available without prescription, are not without potentially serious risk. In a comprehensive review of this class of drugs, Chin and Commerford (p. 500) caution that 'there is now strong evidence to suggest that both the traditional NSAIDs (excluding aspirin) and the COX-2 inhibitors are associated with an increased risk of thrombotic events (including myocardial infarction and stroke) and excess mortality both in patients with and without pre-existing cardiovascular disease'.

Following an exhaustive review of systematic reviews and meta-analyses, the authors conclude that COX-2 inhibitors are contraindicated in patients with ischaemic heart disease or stroke. Caution is advised in respect of patients with hypertension, diabetes or hypercholesterolaemia. Because NSAIDs are used for symptom relief rather than disease modification, the authors caution against 'reflex prescription' of these agents, and plead for measured and judicious use.

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