Diabetes and tuberculosis

A link between diabetes and tuberculosis (TB) has been known for many years. It is not surprising that patients with diabetes may be more susceptible to TB, as with many other infections. However, more recent studies have shown that the link is stronger than previously known. Also, the prevalence of both diabetes and TB has greatly increased in recent years, again making the importance of the diabetes/TB link even greater.

Recently, the World Health Organization (WHO) published a Collaborative framework for care and control of tuberculosis and diabetes,1 which is a welcome initiative highlighting this important topic. WHO reports that the presence of diabetes increases the risk of TB by three times, and accounts for about 8% of new TB cases annually. There is also evidence that diabetic patients with TB respond less well to treatment, have a higher mortality rate, and survivors are more likely to relapse.

The 8% of new TB cases related to diabetes accounts for over 700,000 cases per year worldwide. This raises the question of TB screening in diabetic patients, and also perhaps diabetes screening in TB patients. Standard symptom-based questions may be sufficient for TB screening in diabetic patients (prolonged cough, night sweats, fever, etc), and they should be asked at presentation and at least annually thereafter. Diabetes screening in TB patients is less easy. Ideally, a glucose tolerance test (GTT) should be done, but a random (or preferably fasting) blood glucose is acceptable. This should be done at or soon after TB diagnosis.

The new WHO framework is a welcome reminder to African doctors of the important link between TB and diabetes. Further research on the problem is also needed; for example, do levels of glycaemic control (as measured by HbA1c) affect TB risk, and also outcome, if TB infection does occur? Professor Geoff Gill

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Reference