Commentary

How should we best manage patients with immune-mediated inflammatory disease on immunosuppressant therapy during the ‘swine flu’ pandemic?

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Dear Sir, It is well recognised that patients with autoimmune disease have an increased risk of infection both through virtue of their underlying disease and through concomitant drug use. Following the heavily publicised announcement of the H1N1 or ‘swine flu’ pandemic, there has been much concern expressed by patients taking immunosuppressive therapy.

The risk of influenza in these patient groups has not been defined. Extrapolation from data in transplant recipients suggests that prevalence of influenza is low (0–2%). However, such patients are more likely to develop severe disease and show prolonged viral shedding, hence perpetuating the spread of the disease.

Recently published management guidelines have advocated the discontinuation of biologic and Disease Modifying Anti Rheumatic Drug (DMARD) therapy for 7 days following contact with an infected individual. There is no evidence that patients with rheumatic disease on immunosuppressants are more prone to influenza. It is therefore uncertain whether prophylactic discontinuation of immunosuppressants will protect the patient from developing swine flu or the potential complications of the virus. Additionally, discontinuation of immunomodulatory therapy may precipitate a flare of the underlying rheumatic disease. Whilst there have been no studies looking at serological responses to influenza infection in immunocompromised patients, there have been a number of studies reporting serological response to influenza vaccine which may act as a surrogate indicator of the immune response. In a study among patients with autoimmune disease on standard DMARD therapy, immunisation produced protective antibody titres in 82–93% of patients, which is comparable to a sero-conversion rate of 89–94% among healthy controls. Kaine et al. showed that anti-tumour necrosis factor (anti-TNF) therapy has no impact on the serological response to influenza vaccine. In vitro studies have shown that T-cell reactivity to influenza increases on treatment with anti-TNF. TNF antagonists have successfully been used to treat rheumatic disease in hepatitis C and human immunodeficiency virus positive patients with no deterioration in viral co-morbidity. Therefore, circumstantial evidence supports that the majority of patients on immunosuppressant therapy will be able to mount a suitable humoral response and immune defense to the H1N1 virus.

Our recommendation is that anti-rheumatic therapy should only be discontinued in proven cases of H1N1 or severe disease. Anti-viral therapy should be instituted in all cases within 48 h of symptoms with a view to shortening the disease severity, duration of symptoms and length of viral shedding. Additionally, all patients on immunosuppressant therapy should continue to be offered the seasonal influenza vaccine.
Conflict of interest: None declared.

References


