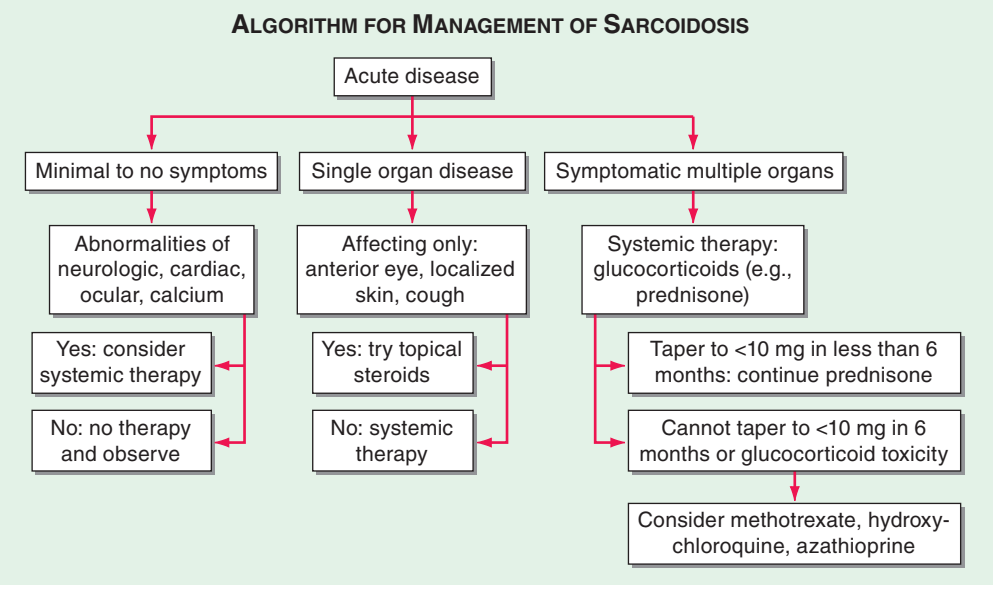

FIGURE 390-9 **The management of acute sarcoidosis is based on level of symptoms and extent of organ involvement.** In patients with mild symptoms, no therapy may be needed unless specified manifestations are noted.

Table 390-2 summarizes the dosage and monitoring of several commonly used drugs. According to the available trials, evidence-based recommendations are made. Most of these recommendations are for pulmonary disease because most of the trials were performed only in pulmonary disease. Treatment recommendations for extrapulmonary disease are usually similar with a few modifications. For example, the dosage of glucocorticoids is usually higher for neurosarcoidosis and lower for cutaneous disease. There was some suggestion that higher doses would be beneficial for cardiac sarcoidosis, but one study found that initial prednisone doses >40 mg/d were associated with a worse outcome because of toxicity.

Systemic therapies for sarcoidosis are usually immunosuppressive including glucocorticoids, cytotoxics, or biologics. Although most patients receive glucocorticoids as their initial systemic therapy, toxicity associated with prolonged therapy often leads to steroid-sparing alternatives. The antimalarial drugs such as hydroxychloroquine are more effective for skin than pulmonary disease. Minocycline may also be useful for cutaneous sarcoidosis. For pulmonary and other extrapulmonary disease, cytotoxic agents are often used. These include methotrexate, azathioprine, leflunomide, mycophenolate, and cyclophosphamide. The most widely studied cytotoxic agent has been methotrexate. This agent works in approximately two-thirds of sarcoidosis patients, regardless of the disease manifestation. In one retrospective study comparing methotrexate to azathioprine, both drugs were equally effective. However, methotrexate was associated with significantly less toxicity. As noted in Table 390-2, specific guidelines for monitoring therapy have been recommended. Cytokine modulators such as thalidomide and pentoxifylline have also been used in a limited number of cases.

The biologic anti-TNF agents have recently been studied in sarcoidosis, with prospective randomized trials completed for both etanercept and infliximab. Etanercept has a limited role as a steroid-sparing agent. Conversely, infliximab significantly improved lung function when administered to glucocorticoid and cytotoxic pretreated patients with chronic disease The difference in response between these two agents is similar to that observed in

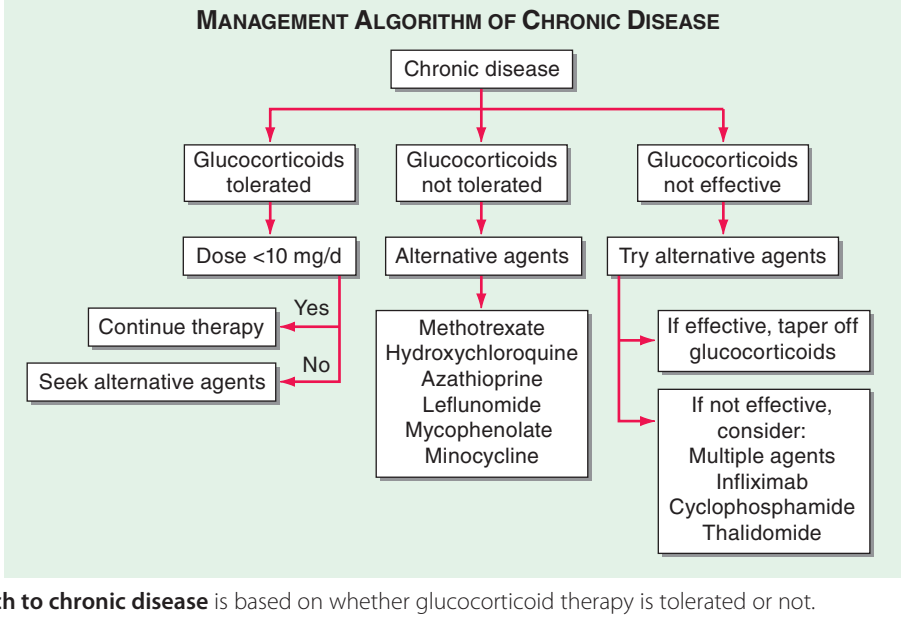

FIGURE 390-10 **Approach to chronic disease** is based on whether glucocorticoid therapy is tolerated or not.