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Infliximab in Ankylosing Spondylitis

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Anti-tumour necrosis factor (TNF) therapy is a major step forward in the treatment of patients with spondyloarthritides, especially ankylosing spondylitis. There are three anti-TNF agents available; infliximab and etanercept are approved for the treatment of ankylosing spondylitis on the basis of randomised controlled trials, while at present there is only an open pilot study for adalimumab.^[1]

The majority of patients with ankylosing spondylitis experience clinically relevant benefits from infliximab therapy, approximately 50% improvement of disease activity, and the onset of efficacy is rapid. Infliximab has been shown to be efficacious after 2 weeks and clinical experience suggests that initial relief of symptoms may occur after 24 hours. Magnetic resonance imaging has shown that improvements in spinal inflammatory lesions are detectable as early as 6 weeks after initiation of infliximab therapy and this improvement increases with time over 6, 12 and 24 months.

About 10% of patients discontinue infliximab therapy every year, mainly because of adverse events and for pragmatic reasons. After 3 years, 62% of patients in a clinical trial remained on therapy and had a low state of disease activity or were in remission; however, most patients who discontinued infliximab therapy after 3 years relapsed within 6 months. This prolonged activity has not been achieved with other medications so far.

In patients with Crohn's disease in which, importantly, a different regimen of infusions was used, antibodies to infliximab were frequently detected and were associated with low infliximab levels, infusion reactions and a shorter duration of clinical response.^[2] However, in patients with ankylosing spondylitis there currently appears to be no justification for concomitant immunosuppressants. In patients completing 2–3 years of continuous therapy at a dosage of 5 mg/kg, antibodies did not seem to cause significant clinical problems, even following reinfusion after several months of infliximab withdrawal.

Serious adverse events are rare with infliximab therapy, with the major concern being infection; however, international opinion appears to be that the benefits of infliximab therapy clearly outweigh the risks.

Taken together, infliximab therapy clearly improves signs, symptoms and function of patients with ankylosing spondylitis and there is an indication that structural damage can also be influenced by infliximab.^[3] Further studies are needed to address this important topic in more detail, especially with regard to early therapy and the prevention of ankylosis and spinal stiffness.

References

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