

Palpation of the subcutaneous borders of the tibia can be difficult in the swollen leg and we recommend marking anatomical landmarks before making the incisions. Care must be taken when decompressing the deep posterior compartment, as the posterior tibial neurovascular bundle lies just deep to the investing fascia (see figure). A lateral incision inadvertently placed over the fibula will expose periosteum, and extending the incision too far distally may expose the peroneal tendons. Exposure of bone or tendons increases the risks of delayed healing, infection, and ultimately amputation. After decompression, the viability of muscle is carefully assessed and all non-viable tissue radically excised.

Management of the fasciotomy wounds remains controversial. Wound complications were recorded in 51% of patients who had primary or delayed primary closure compared with 5% who had split skin grafts.¹⁰ If all devitalised tissue has been confidently excised we favour immediate coverage with meshed, split skin grafts secured with a foam vacuum suction dressing. Cosmetic appearance may be improved by subsequent scar revision.

Fasciotomies are not benign procedures, and some evidence implies that they may lead to chronic venous insufficiency due to impairment of the calf muscle pump.¹¹ The role of fasciotomy in cases of compartment syndrome that have been diagnosed at a late stage (after 8 hours) is questionable. Established myoneural deficits seldom recover after fasciotomy. Furthermore, fasciotomies performed after 35 hours from injury were invariably associated with severe infection and even death.¹² Compartment syndrome remains a challenging condition, but significant morbidity can be avoided by prompt diagnosis and decompression using a careful two incision fasciotomy technique.

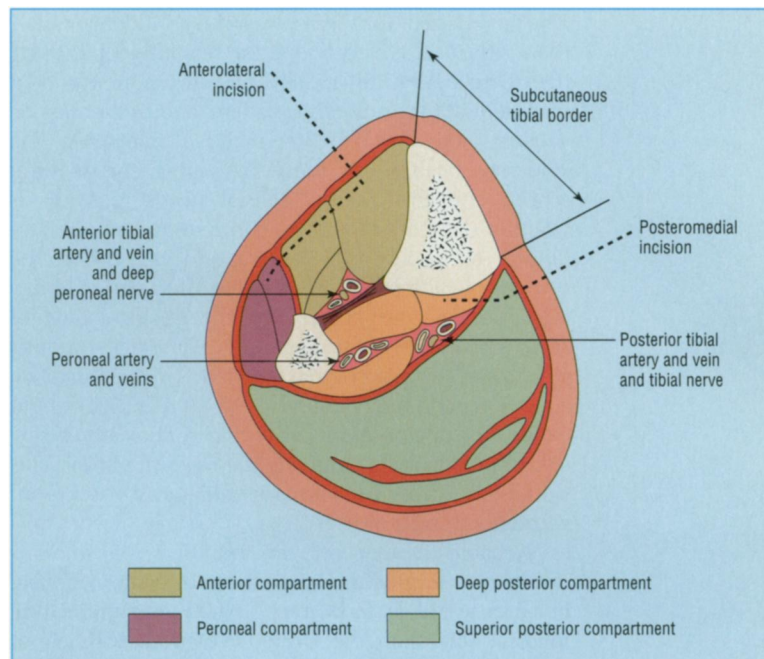
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Cross section through leg showing site of fasciotomy incisions to decompress all four compartments

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Patient education programmes for adults with rheumatoid arthritis

Benefits are small and short lived

As with other chronic diseases, no cure is available for most types of arthritis including rheumatoid arthritis. Furthermore, the course of the disease is often unpredictable, and the symptoms can vary from day to day or even from hour to hour. Because of the nature of pain and disability, the partial and inconsistent effects of treatment, and the unpredictability that people with arthritis face on a daily basis, education programmes for patients have

become a complement to traditional medical treatment.¹ These programmes have given people with arthritis the strategies and tools necessary to make daily decisions to cope with the disease.^{2,3}

From the available literature, the effectiveness of educational interventions for people with rheumatoid arthritis and the clinical relevance of the benefits are still unclear. It is also unclear what specific types of educational interventions are most effective in improv-

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ing health status for patients with chronic diseases.⁴ Educational strategies can vary from the provision of information only to the use of cognitive behavioural strategies.

A recent Cochrane review assessed the effectiveness of education programmes in patients with rheumatoid arthritis, based on a systematic review of the evidence from randomised controlled trials.⁵ This review focused on the effects of patient education on pain, disability, joint counts, patients' and doctors' global assessment, affect scores, and measures of acute phase reactants. This set of outcome measures has been acknowledged as the gold standard for outcome measures in rheumatoid arthritis by the World Health Organization and the International League for Associations for Rheumatology.⁶

Small, but statistically significant, beneficial effects of patient education were found for scores on disability, joint counts, patients' global assessment, psychological status, and depression.⁵ These effects were quite robust as most sensitivity analyses also showed significant effects. Patient education does, however, have two major drawbacks. Firstly, its statistically significant benefits are modest. In comparison to no intervention, patient education produced a 4% decrease in pain, 10% improvement in disability, 9% improvement on the Ritchie articular index, 12% improvement on the impact scale and a 5% improvement on the affect scale of the arthritis impact measurement scales, and 12% improvement on depression scores.⁵ The clinical relevance of these improvements is still unclear, but it would be worth while to do a cost effectiveness analysis for patient education to see how this intervention compares with drug interventions. Secondly, the benefits of patient education are short lived; at final follow up (up to 12 months after the intervention) no significant benefits were found. Possibilities of improving the long term effects of patient education programmes—for example, with booster sessions—need to be explored, although the few studies that did include booster sessions found little effect.⁷⁻¹⁰

In evaluating the clinical effects of patient education programmes included in the Cochrane review, we need to take into account that patient education was provided in addition to standard medical care. Therefore, the effects of patient education are always supplementary to the benefits of standard medical care. Also, in all these studies patients were invited to take part in an experimental procedure and randomly allocated to intervention or control groups. This contrasts with routine clinical practice, in which patients may be more likely to select themselves for educational sessions.

To examine the differential effects of various types of patient education the Cochrane review made a distinction between three types of patient education: information only, counselling, and behavioural treatment. "Information only" included all interventions aimed primarily at the exchange of information, by means of persuasive communication or information brochures; these interventions did not include a behavioural component and were not aimed at generating support. Counselling included interventions mainly aimed at social support and giving patients the opportunity to discuss their problems.

Behavioural treatment referred to interventions that included techniques aimed at behavioural change, such as behavioural instruction, skills training, and biofeedback.⁵

Neither information only nor counselling programmes showed any significant effects, but behavioural treatment showed statistically significant beneficial effects for scores on disability, patient global assessment, and depression.⁵ Although only studies including a control group that had not undergone any intervention were included in the Cochrane review, a few head to head comparisons could be made. These showed some superiority of behavioural treatment over information only, but no significant differences were found between effects of counselling and the other two types of interventions.

The relations between changes in behaviour and in health outcomes are still unclear. To explore which factors can improve the benefits, the causal relations between intervention and outcome should be clarified. Therefore, it is necessary to investigate factors that may facilitate or mediate these beneficial effects.

In conclusion, available evidence about patient education programmes for adults with rheumatoid arthritis shows that these programmes have clear but relatively small benefits that are short lived. Their clinical significance is unclear, as are the relations between changes in behaviour and changes in health outcomes.

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