head resection is still accepted as treatment of choice in most instances. Unstable distal ulnar stumps and loss of power grip raised the wish for an alternative. There is a new distal ulnar head prosthesis on the market, which might be an possible implant for the future for selected cases.

On the level of the finger joints Swansons silastic implants, also in newer different designs, are still the implants of choice for most surgeons. High implant failure rate and the wish to go away from Silastic as implant material, motivated different authors for new implant designs and the use of newer materials. Despite these efforts a real breakthrough as well in design as in materials is still somewhat missing. Carbon fibre based materials or ceramics might have a good potential for the future.

Besides the implant design and the material, the understanding of soft tissue pathomechanics and its consequences for prosthetic replacement is raising. Ligament reconstruction and possible use of artificial ligaments might be a concept for the future.

The lecture should give an understanding of the pathomechanics of rheumatoid arthritis and its consequences for prosthetic replacement. It should give an overview of current prosthetic designs and their clinical results and provide an outlook of new concepts of prosthetic replacement and future development.

SP0108 PRESENT STATUS OF TALOCRURAL ARTHROPLASTY IN RHEUMATOID ARTHRITIS

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10.1136/annrheumdis-2001.48

The new approach of interdisciplinary management of the multiple joint disease acknowledges the distinction between interpretation of the systemic and of the local activity. The systemic inflammatory disease may be modified or controlled by effective drug protocols. This does not prevent or exclude local inflammation or progressive alterations of various joint in the „malignant forms of RA. In this respect rheumatoid arthritis surgery serves as local augmentation for the systemic therapy to prevent disability and/or to restore function.

An involvement of the talocrural and of the subtalar joint is reported in up to 50% in RA. At the same time the ipsilateral knee joint shows a local activity in 60% of the RA-patients.

Depending on the degree of the local activity and on the degree of deterioration the concept of rheumatoid surgery in the early phase includes the irradiation of the inflamed tissue in order to reduce the progress of pain and joint damage. In the later phase related to the Larsen, Dale, Eek radiographic stages > III reconstructive surgery of the talocrural joints is demanded to reduce the impairment and to restore the daily activities of the patients. To reduce pain, to stabilise and to realign the foot in neutral position ankle arthroplasties and arthrodesis are alternative procedures.

The function of the ankle joint extremity considerably influences the other joints of the lower. Stiffness and ankylosis of the ankle joint reduces the functional activity of the lower extremity. The stress distribution at the lower limb may alter the adjacent joints if the ankle joint is arthrodesed.

In former years the outcome of ankle arthroplasties has been unpredictable. The results following total replacement of the ankle using the ICLH-, TRP- or the Mayo ankle prostheses (published before 1996) reported an incidence of 22% to 75%

aseptic loosening with a follow-up of 3 to 9 years. Only the experience with a follow-up of 5 years in 66 RA-patients with the modified TRP-arthroplasty reported by Pahle *et al.*, 1987 showed good results in 83% of the patients. 1.5% of the patients had bad results after this observation time.

With new “near anatomic” designs of total ankle prostheses in a comparative study no significant difference had been observed for the OA-group 72.7% and for the RA-group 75.5% at 14 years (Kofoed, Sorensen 1998). A cumulative survival rate of the ankle replacement at 6 years of 94.3% has been reported by Schill *et al.*, 1998. Evenmore it has been shown that in comparison to an ankle arthrodesis the total ankle replacements give significantly better pain relief, better function and a lower infection rate without development of subtalar arthrosis. Especially for patients with a multiple joint involvement in RA it is of great importance that after the total ankle arthroplasty a normal weight bearing is allowed already two weeks after implantation. In comparison to this fact ankle arthrodesis needs reduced weight bearing for at least 6 to 8 weeks.

Pain relief is achieved in more than 90% of the patients after an average follow-up time of more than 3 years. The implantation technique and the implants have been improved. Most of the available designs offer a cementless implantation of the ankle arthroplasties.

The functional results show an increased motion after total ankle replacement.

It is very important to exclude those patients with severe osteonecrosis of the talus or/and of the distal tibia to avoid early migration and the potential of early loosening.

Conclusion We like to emphasise that it seems appropriate today that in case of deterioration of the ankle joint in RA the indication for a total ankle replacement is preferable and the results are superior to an ankle arthrodesis.

Biology and the destruction of cartilage/ bone – Saturday 16 June, 12.00-13.30/ Congress Hall

SP0109 HOW USEFUL ARE CONVENTIONAL DMARDS AND WHEN SHOULD BIOLOGICS, IN PARTICULAR TNF BLOCKING AGENTS, BE USED?

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10.1136/annrheumdis-2001.49

Rheumatoid arthritis is a chronic, systemic, inflammatory disease with polyarthritis as the most dominant clinical sign. Pharmacotherapy is, increasingly, the corner stone of treatment. Conventional drug treatment consists of NSAIDs, (combinations of) DMARDs and corticosteroids.

In recent years dramatic changes have occurred in the treatment of the disease. These can be categorised as follows:

- Early treatment: it has become clear that (irreversible) joint damage occurs relatively early in the disease course. In addition recent studies have indicated that more advanced stages of the disease are more difficult to treat.
- More and more effective DMARDs. Some of these DMARDs have a relatively fast mode of action, allowing for more adequate drug titration towards efficacy. Another interesting