

PROXIMAL INTERPHALANGEAL JOINT REPLACEMENT

As with all rheumatoid surgery, medical control of the disease is paramount. Rheumatoid disease in the hands cannot be treated by surgery- all that can be offered is reconstruction of the damage once the disease has been brought under control. In the present era of powerful immunosuppressants this relegates synovectomy to the second division.

The primary hand function is gripping. Most grip comes from MCP flexion, less from the PIP joint and least from the DIP. Anything that decreases grip range and strength is to be deplored. Always attend to the MCP joints first and obtain maximal active flexion range with them.

Most Silastic PIP joint replacements will not flex over 70°. Unless the patient has fixed extension due to a Swan neck deformity preoperatively, they will be functionally worse following replacement.

Most Silastic PIP joint replacements will not afford extension of better than -10°. Unless the fingers are flexed into the palm due to a fixed boutonniere deformity causing functional or hygiene problems, patients will not be improved by PIP joint replacement.

Pain, uncontrolled by other means is an absolute indication for replacement but is rare. Joint destruction with painful loss of active movements only is rare and is an indication provided that the metacarpophalangeal joints maintain a full range of movements. Boutonniere and swan neck deformities cause loss of passive as well as active movements. Joint replacement should be undertaken with caution. Try and obtain a soft tissue correction first, then replace the joint if this is the residual problem.

Cosmesis is improved by PIP joint replacement. We are not (I hope) cosmetic hand surgeons.

Instability in the frontal plane (radial and ulnar deviation) is a relative contra-indication. A silastic replacement will give some lateral stability but not much. Arthrodesis is a better solution.

All dorsal approaches weaken the extensor mechanism so save them for the Swan neck finger. I have not found the Chamay approach so good, as it stretches or scars down. A midline split is safer.

True lateral or medial approaches are not suitable in RA although they may be useful in OA. It is difficult to judge the bone cuts.

Volar approaches are good, especially if there is a flexion deformity to be released. Results are truly mediocre apart from those of Prof. Swanson.

For instance Lin 1995 showed no significant increase in the range of movement nor any improvement in frontal plane deformities. There was however, good pain relief. Surface replacements of the PIP joint have not shown themselves to be useful in RA due to collateral soft tissue instability. The same may not apply to OA..

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