

## PERIOPERATIVE MANAGEMENT OF THE PATIENT WITH RHEUMATOLOGIC DISEASE

Patients with rheumatologic disease (e.g. rheumatoid arthritis, systemic lupus erythematosus) should receive the same preoperative cardiovascular, pulmonary, and other risk assessment as other patients.

### Additional preoperative considerations:

- Preoperative assessment of the status of the patient's rheumatic disease. In general, active flares of disease should be avoided.
- Assessment of hypercoagulable states, especially in patients with SLE.
- Assessment of steroid use, including pulse of steroids within the last year, even if the patient is no longer taking steroids. (see "**Stress Dose Steroids**").
- Assessment of level of immune suppression.

### Management of anti-rheumatic agents

Methotrexate	Usually given once weekly. A prospective randomized trial of patients with RA undergoing elective orthopedic surgery showed fewer complications, infections, and flares in the group that continued methotrexate rather than discontinuing it. <sup>1</sup>
Leflunomide	Recommended to continue. One trial showed no difference in wound healing in orthopedic surgery patients. <sup>2</sup> Additionally, long half life (~ 2 wks) would make complete discontinuation problematic.
Sulfasalazine	Consider holding on day of surgery. <sup>3</sup>
Azathioprine	Consider holding on day of surgery. <sup>3</sup>
Hydroxychloroquine (Plaquenil)	Recommended to continue. One retrospective study showed no difference in postoperative wound healing or infections. <sup>3</sup>
TNF-alpha inhibitors— Infliximab (Remicade), Adalimumab (Humira), Etanercept (Enbrel)	<ul style="list-style-type: none"> <li>• Some small studies (n=31 or less) have not shown a difference in orthopedic surgery, but were likely underpowered.<sup>3,4,5</sup></li> <li>• One group recommends for "sterile" site surgery to hold infliximab for 1 month, adalimumab for 3-4 wks, and etanercept for 1-2 wks, and for "septic" environment or risk surgery (abdominal surgery, joint replacement) to stop these agents for twice as long. Postoperatively it is recommended restart these agents once wound healing is complete and there is no evidence of infection.<sup>3</sup></li> <li>• We recommend discussion with the patient's rheumatologist and surgeon regarding use of these agents in the perioperative period.</li> </ul>
Anakinra, Rituximab, Abatacept	Recommend discussion with the patient's rheumatologist.
NSAIDs	(see "PERIOPERATIVE MEDICATION MANAGEMENT")

**References**

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3. Pieringer H, Stuby U, Biesenbach G. Patients with rheumatoid arthritis undergoing surgery: how should we deal with antirheumatic treatment? *Semin Arthritis Rheum.* 2007;36(5):278-86. Epub 2007 Jan 3.
4. Bibbo C, Goldberg JW. Infectious and healing complications after elective orthopaedic foot and ankle surgery during tumor necrosis factor-alpha inhibition therapy. *Foot Ankle Int.* 2004;25:331-335.
5. Giles JT, Bartlett SJ, Gelber AC, et al. Tumor necrosis factor inhibitor therapy and risk of serious postoperative orthopedic infection in rheumatoid arthritis. *Arthritis Rheum.* 2006;55:333-337.
6. Axford JS. Preoperative evaluation and perioperative management of patients with rheumatic diseases. *UpToDate.* 2006 Aug 28.