Khot A, Bowditch M, Powell J, Sharp D. The Use of Intradiscal Steroid Therapy for Lumbar Spinal Discogenic Pain. Spine 2005;29:833-837.

Design: Randomized clinical trial

Population/sample size/setting:

- 120 patients (55 men, 65 women, mean age 44) seen in department of orthopedics and trauma in the UK
- All identified as discogenic pain on the basis of non-radicular back pain unresponsive to conservative therapy, MRI signs of degenerative disc changes and concordant pain on discogram done under fluoroscopic guidance
- Randomized at the time of discography to 1 ml injection with 40 mg methylprednisolone (n=60) or equal volume of saline (n=60)
- Physicians performing injection were aware of contents of injection, but patients were unaware of contents
- Follow-up completed at 1 year on 46 in steroid group and 52 in saline group by clinic visit and by mail

Main outcome measures

- Oswestry scores were 50.8 in steroid group and 49.8 in saline group at baseline; steroid group had mean change of 2.28 and saline had mean change of 3.42; group differences were not significant
- Pain VAS had median change of 0 in both groups at 1 year follow-up

Authors' conclusions:

- There is no clinical benefit to intradiscal steroid injection

Comment:

- It is slightly unusual to have no improvement in either group with observation over 12 months; generally some remission is expected in absence of treatment
- This would not undermine conclusions of authors, but would suggest that this group of patients might have had unfavorable prognoses at baseline
- Authors do not state what would constitute a clinically important change in Oswestry or VAS; not clear what would have formed basis for sample size in absence of knowing what effect size they were interested in

Assessment: Adequate for evidence that intradiscal steroid injection is unlikely to relieve pain or provide functional benefit in patients with nonradicular back pain