Background

With 9.6% of US population (29 million; 22% are female) golfing on 17,000 golf courses in a $60 billion industry, golf is important. Golfers want to return to the sport after surgery, but there are no studies to provide a basis for expectations.

Purpose

This study evaluates the ability to return to golf, pain experienced, and skill level achieved after various types of spine surgery.

Study Design

Prospective data (clinical, radiographs, golf-related) retrospectively reviewed

Patient Sample

23 consecutive amateur golfers (13 Male,10 Female) undergoing spinal surgery for degenerative disease (17) or deformity (6).

Outcome measures

Visual Analog pain Scores (VAS), Oswestry Disability Index (ODI), pain medication records; Golf related: frequency of play, handicaps, VAS (while playing, after play), Method of transporting clubs (electric cart, pull cart, carry clubs)

Methods

The average age: 61 years (range 21-75 years). Surgery types: Short fusion (SF) 1-3 levels- 12 patients, Long fusion (LF) 4-10 levels- 9 patients, multilevel laminectomy- 2 patients. Excluded: patients requiring simple discectomy, tumor, level one trauma. Clinical (VAS, Oswestry, pain medication), radiographic, golf outcomes (effect of surgery on golf frequency, handicap, and VAS before/during/after playing) were prospectively collected preop, 1 year, 2 years.

Results

Follow-up averaged 50 months (range 24-108 months). Complications: Infection- 1, adjacent fracture- 1, additional surgery (lami/fusion) - 3. Clinical and golf related outcomes improved ($P<0.01$). Preop VAS- 5.6 (SF-5.4, LF-5.8, Lami-5.5), VAS while golfing-5.9 (SF-5.8, LF-6.4, Lami-4.5), after golf-7.1 (SF-7.3, LF-6.9, Lami-7.0); At 2 years: VAS-2.8 (SF-2.3, LF-3.6, Lami-3.0), VAS while golfing-3.3 (SF-2.8, LF-4.0, Lami-3.5), after golf-4.5 (SF-4.0, LF-5.0, Lami-5.5). Oswestry: preop-39.9 (SF-37, LF-46, Lami-31), 1 year-16.4, 2 year-19.9. Frequency of golf play per year remained similar: pre-58.9, 2years-55.7. Handicaps remained similar: pre-21.8 (SF-22.3, LF-22.6, Lami-16), 2 years-22.3(SF-23.5, LF-23.3, Lami-12). Transporting clubs during play by Golf Cart/Pull Cart/Carry Clubs: pre-17/4/2, 2 years-19/1/1. Only 2/23 did not return to golf postop (SF-1/12, LF-1/9), and 9/23 decreased frequency of golf postop. For those decreasing or quitting golf postop (N=11 total), reasons: pain-4, time-3, money-2, interest-1, other-1.

Conclusions

Amateur golfers who undergo spinal surgery (multilevel laminectomy, short fusion, or long fusion for deformity) can reliably and successfully return to golf postop. Pain immediately after golfing increased with time of follow up, but was still significantly better than preop. Frequency of play declined slightly after surgery, mostly for reasons unrelated to pain. Skill defined by handicaps remained similar.