Paper #12

Home Health Services are not Required Following Total Hip Arthroplasty

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Introduction: Total hip arthroplasty (THA) is one of the most successful surgical procedures available to patients with degenerative joint disease and has been shown to consistently improve quality of life, and restore function. Historically at our institution, all postoperative THA candidates have received home health services (HHS), consisting of visiting nurses and physical therapists. With a more technologically savvy patient population however, rehabilitative computer applications (apps) can be used to electronically deliver postoperative services.

Methods: This study is a retrospective single-center analysis of the effectiveness of electronic rehabilitative services in patients receiving unilateral THA. All eligible patients were operated on between October 2016 and March 2017 by a single surgeon and were between the ages of 18 and 90. At the discretion of the operating surgeon, patients were selected to either proceed with the Electronic Patient Rehabilitation App (EPRA) with home health services (HHS) or the EPRA alone.

Results: In total, 454 patients received either (n=374) EPRA-HHS or (n=80) EPRA alone. The average age and American Society of Anesthesiologists Score in patients receiving EPRA-HHS was 64.85 (SD ±9.8) years and 2.24 (SD ±0.57) whereas, the EPRA cohort was 59 (SD ±12.5) years and 1.63 (SD ±0.52), respectively. No statistically significant difference was observed between the cohorts at baseline and 12-week for the PRO instruments (VR/SF-12 PCS/MCS and HOOS Jr.). However, a statistically significant improvement in VR-12 PCS and KOOS Jr ($p<0.0001$) regardless of the type of rehabilitation the patient received.

Conclusion: The integration of electronic application rehabilitation tools is slowly gaining acceptance within the orthopaedic community. Our study comparatively evaluated patients receiving EPRA and EPRA-HHS demonstrating that there was no difference in PRO scores. Thus, it may be assumed that both methods of postoperative rehabilitation are equivalent in terms of clinical outcomes and that HHS may be a redundant service.

Notes