COST-EFFECTIVENESS ANALYSIS OF AMBULATORY VERSUS IN-PATIENT ACL RECONSTRUCTION SURGERY

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• Study Objective:
  • Compare the cost-effectiveness and functional outcomes of ambulatory vs in-patient ACL reconstruction surgery

• Methodology:
  • Total of 84 patients with ACLR done in between Jan 2012 to June 2013
  • Divided into three groups
  • With a min. follow-up duration of 4 years
Results

- Operative time (min.)

  - Ambulatory case operative time (64 +/- 14 min.) is significantly shorter than in-patient cases (85 +/- 19min.)(p<0.05)

- Monetary cost in HKD (hospital stay plus operative room consumables)
Functional scores at post-op 4 years

- Day Case Group (Group 1 plus Group 2) vs In-patient group (Group 3)
Conclusion

• First centre in the HA to perform ambulatory ACLR surgery
• No significant difference in the quality-adjusted life years (QALY) gained between the ambulatory group and the in-patient group (0.72 vs 0.65, p>0.05)
• Both groups achieved similar improvement in functional scores at 4 years post-op in terms of SF-12, SF-36, CKS and IKDC.
• With a lower monetary cost required, the incremental cost-effectiveness ratio is significantly lower for the ambulatory group vs in-patient group (HKD 82,291 per QALY vs HKD 120,769 per QALY, p<0.05)
• Ambulatory ACLR surgery is a more cost-effective procedure compared with in-patient ACLR, without compromising patients’ safety and post-op functional outcomes.
• This study’s finding should serve as the basis for the future development of ambulatory orthopaedic surgery in HK.