Lost wages secondary to ankle arthritis in patients undergoing ankle fusion or replacement

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Study performed at the Department of Orthopaedics, University of British Columbia
I, Alastair Younger declare that in the past 3 years:

I have received support from the following companies:
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Cambie Surgery Centre, Specialist Referral Clinic, Footbridge Centre for Integrated Foot Care
Introduction

• In Canada wait times for surgery are a year and more
• Consult wait times are over two years
  – What impact does this have on wage earning capacity?
• PURPOSE
  – Determine the lost wages in the Province of British Columbia secondary to ankle arthritis
Three steps to this study

• 1. Use the employment data from the COFAS database
• 2. Scale the information to BC billing statistics
• 3. Use the Statistics Canada data to determine the future lost wages for this patient group
• Outcome measured at surgery, 2 years and average 6.7 years follow up
Employment status

- Employment status was reported using the MODEMS outcome instrument, and the question asked if the patient was:
  - (1) working,
  - (2) on leave of absence,
  - (3) unemployed,
  - (4) homemaker,
  - (5) a student,
  - (6) Retired (not due to ill health),
  - (7) disabled or retired due to ill health.

- Items 2, 3, 7 were considered unemployed and items 1, 4, 5, 6 employed.
• The lost wages from the year of surgery until 75 years of age were calculated using census data.
• After the final follow up the reported employment rate until 75 was used to calculate lost income. All figures are quoted in Canadian dollars.
Results

• 127 of 276 patients were under the age of 60 at the time of surgery.
• The average age was 51 years old.
• (45%) were working at the time of surgery, 9 did not specify their work status (7%), and 61 were not working (48%).
• The lost wages in the year of surgery for the unemployed database cohort was $ 2.58 million.
Follow up at 2 and 7 years

• 2 years after surgery the employment rate improved by 6% (8 patients) with a gain in wages of $204,000 for these patients.

• 53 patients were still unemployed for lost wages 2 years after surgery of $2.37 million.

• At 6.7 years average final follow up 50 were working, 12 not specified, and 65 not working.

• The lost wages was 2.55 million dollars in this year.
British Columbia

• Population 4.6 million
• 140 ankle arthritis procedures per year
• 64 (46% of 140 n 89) of are working age group
• 29 patients working age group unemployed
• Using the estimation above the lost wages per year for the working lifetime of these patients is $22.8 million.
Discussion

- The estimated cost of ankle arthritis surgery in the Province is total $1.1 million (Younger et al FAI 2015).
- Once patients loose employment with ankle arthritis the majority do not get back into the job market.
- This study demonstrates that lost wages are a major patient burden for end stage ankle arthritis.
- Health systems need to consider lost wages and lost employment as a driver for access to care.
- Ultimately it is beneficial to provide care to keep patients in the work force.
- This study is likely an underestimate as it not take into account:
  - lost wages for patients not getting in for care
  - Lost wages prior to surgery
  - Lost wages for those over 60
References


References (cont.)