The Epidemiology of Dupuytren’s Disease in South Korea: A Nationwide Population-based Study
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INTRODUCTION

- Dupuytren’s disease (DD)
  - Palmar surface of hand→flexion contracture
  - Fibroproliferative disease
- Etiology of DD
  - Unknown
  - Genetic factor
  - Caucasians in North Europe: m/c
  - Familial history
- Previous epidemiologic reports of DD in Asia
  - Japan
    - Egawa, 1990: 19.7%(men), 0%(women)
    - Tajika, 2013: 7.0%
  - Taiwan
    - Yeh, 2015: 4.52/10^5 (0.005%)
- National Health Insurance Service
  - Big data from Health Insurance Review & Assessment Service (HIRA)
- Purposes of study
  - Investigate the epidemiologic profiles
  - Annual prevalence rate of DD
  - Annual incidence rate of DD
  - Else investigate...
  - Other diseases associated with DD
  - The frequency of surgery for DD

MATERIALS & METHODS

- Big data
  - From HIRA
  - Raw data accumulated as the forms of receipts
  - ICD-10: M72.0 (palmar fascial fibromatosis, Dupuytren)
  - Duration: 2007~2014
- Epidemiologic profiles of DD
  - Annual prevalence: the number of patients who visited hospital at least once the year
  - Annual incidence: the number of patients who visited hospital for the first time in the year
- Total population of South Korea
  - Korean statistical information service
- Other diseases associated with DD
  - Hypertension, diabetes mellitus, ischemic heart diseases, etc.
- Frequency of operation for DD
  - Various operation codes
  - Not unified operation codes
- Statistical analysis
  - Standardization (age-adjusted rate)
    - Direct method
    - Standard population: OECD population (2014)
  - Poisson regression analysis
  - Trend analysis

RESULTS

- Total 16630 patients with DD (2007~2014)
- Mean prevalence rate
  - M : F = 4.79/10^5 : 23.5/10^5 pts.=2.04 : 1
  - All 35.2/10^5 pts.
- Mean incidence rate
  - M : F = 1.89/10^5 : 0.37/10^5 pts.=5.11 : 1
  - All 1.11/10^5 pts.

DISCUSSIONS & CONCLUSION

- Our prevalence and incidence of DD is very lower than Western countries
- However, more than Taiwan (about 7 times)
- Most common associated diseases: HTN, DM, hyperlipidemia, etc.
- The number of surgery for DD is increasing