

出國報告（出國類別：其他：國際會議論文發表）

於國際會議 EULAR2019 發表論文

題目：僵直性脊椎炎患者 ASAS 健康指數的性別差異

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出國期間：108 年 6 月 10 日至 108 年 6 月 16 日

報告日期：108 年 6 月 17 日

摘要（含關鍵字）

背景：脊椎關節炎的評估國際社會健康指數（ASAS HI）已經開發和驗證，以評估脊椎關節炎患者的健康和功能。然而，ASAS HI 是否在男性和女性之間存在差異尚不清楚。本研究之目的是要利用臺中榮民總醫院僵直性脊椎炎患者登錄資料比較僵直性脊椎炎患者 ASAS 健康指數的性別差異

目的：比較僵直性脊椎炎患者 ASAS 健康指數的性別差異。

結果：本研究共納入 307 例 AS 患者[62 例（20.2%）女性，平均年齡 46.4 歲（S.D.13.3），平均症狀持續時間 20.6 歲（S.D.12.1）]。女性患者發病年齡較大（ 29.2 ± 12.6 vs 24.9 ± 9.6 歲， $p = 0.015$ ），症狀持續時間較短（ 15.7 ± 11.6 vs 21.8 ± 12.0 年， $p < 0.001$ ），吸煙比例較低（6.5%） vs 48.2%， $p < 0.001$ ），ASAS HI 較高（ 5.9 ± 3.8 vs 4.3 ± 3.4 ， $p = 0.001$ ），ASDAS-ESR 較高（ 1.9 ± 0.8 vs 1.5 ± 0.8 ， $p < 0.001$ ）和較低的 mSASSS（ 6.0 ± 11.4 與男性患者相比，為 21.8 ± 23.1 ， $p < 0.001$ ）。BASFI（ 1.1 ± 1.6 對 1.2 ± 1.7 ， $p = 0.765$ ），ASDAS-CRP（ 1.5 ± 0.9 對 1.5 ± 0.9 ， $p = 0.972$ ）和 BASDAI（ 2.4 ± 1.8 對 2.0 ± 1.4 ）無顯著差異。女性和男性之間， $p = 0.115$ 。在多變量分析中，男性性別與更好的 ASAS HI 顯著相關（ $B = -1.73$ ，95%CI: -2.55, -0.91， $p < 0.001$ ）。ASAS HI 的其他顯著預測因子包括 BASDAI（ $B = 1.29$ ，95%CI: 1.07, 1.50， $p < 0.001$ ），疾病持續時間（ $B = 0.04$ ，95%CI: 0.01, 0.06， $p = 0.015$ ），mSASSS（ $B = 0.02$ ，95%CI: 0.01, 0.04， $p = 0.003$ ）和乙型肝炎（ $B = 0.99$ ，95%CI: 0.03, 1.96， $p = 0.044$ ）。

結論：本研究首先發現了男性性別與 AS 患者的 ASAS HI 降低顯著相關。

建議：此發現有助於未來臨床醫師注意評估並改善女性僵直性脊椎炎患者之健康。

關鍵字：僵直性脊椎炎，ASAS 健康指數，性別差異

本文

一、目的

脊椎關節炎的評估國際社會健康指數 (ASAS HI) 已經開發和驗證，以評估脊椎關節炎患者的健康和功能。然而，ASAS HI 是否在男性和女性之間存在差異尚不清楚。本研究之目的是要利用臺中榮民總醫院僵直性脊椎炎患者登錄資料比較僵直性脊椎炎患者 ASAS 健康指數的性別差異。

二、過程

方法：

自 2016 年 11 月起，我們測量並記錄了人口統計學，合併症，家族史，藥物使用，僵直性脊椎炎疾病活動評分 (ASDAS)，巴斯僵直性脊椎炎疾病活動指數 (BASDAI)，巴斯強直性脊柱炎功能指數 (BASFI) 的數據。使用與臺中榮民總醫院 (TCVGH) 的電子病歷系統相關聯的電子病人報告數據系統，在臨床照顧中對 AS 患者進行改良的斯托克僵直性脊椎炎脊柱評分 (mSASSS) 和 ASAS HI。我們在 2017/11-2018/10 期間檢索了 TCVGH 中 AS 患者的最後記錄數據。我們使用多變量線性回歸模型評估了性別與 ASAS HI 之間的關聯。來自單變量線性回歸分析的變量 $p < 0.2$ 包括在隨後的多變量分析中。我們使用前向選擇方法來構建模型。

結果：

本研究共納入 307 例 AS 患者 [62 例 (20.2%) 女性，平均年齡 46.4 歲 (S.D.13.3)，平均症狀持續時間 20.6 歲 (S.D.12.1)]。女性患者發病年齡較大 (29.2 ± 12.6 vs 24.9 ± 9.6 歲, $p = 0.015$)，症狀持續時間較短 (15.7 ± 11.6 vs 21.0 ± 12.0 年, $p < 0.001$)，吸煙比例較低 (6.5% vs 48.2%, $p < 0.001$)，ASAS HI 較高 (5.9 ± 3.8 vs 4.3 ± 3.4 , $p = 0.001$)，ASDAS-ESR 較高 (1.9 ± 0.8 vs 1.5 ± 0.8 , $p < 0.001$) 和較低的 mSASSS (6.0 ± 11.4) 與男性患者相比，為 21.8 ± 23.1 , $p < 0.001$)。BASFI (1.1 ± 1.6 對 1.2 ± 1.7 , $p = 0.765$)，ASDAS-CRP (1.5 ± 0.9 對 1.5 ± 0.9 , $p = 0.972$) 和 BASDAI (2.4 ± 1.8 對 2.0 ± 1.4) 無顯著差異。在女性和男性之間, $p = 0.115$)。在多變量分析中，男性性別與更好的 ASAS HI 顯著相關 ($B = -1.73, 95\%CI: -2.55, -0.91, p < 0.001$)。ASAS HI 的其他顯著預測因子包括 BASDAI ($B = 1.29, 95\%CI: 1.07, 1.50, p < 0.001$)，疾病持續時間 ($B = 0.04, 95\%CI: 0.01, 0.06, p = 0.015$)，mSASSS ($B = 0.02, 95\%CI: 0.01, 0.04, p = 0.003$) 和乙型肝炎 ($B = 0.99, 95\%CI: 0.03, 1.96, p = 0.044$)。

結論：

本研究首先發現了男性性別與 AS 患者的 ASAS HI 降低顯著相關。

三、心得

這次 EULAR2019 大會吸引了來自全球五大洲超過 120 國家共一萬四千人參加，共有 4900 篇論文投稿，其中 2205 篇論文 (45%) 被接受於會議中發表，另外 30% 被接受於 ARD supplemental 發表但位於會議中發表，台灣以第一作者於會議中發之論文共 15 篇，台中榮總發表 5 篇論文 (另兩篇分別為陳怡行主任及謝祖怡主任發表)，本人發表三篇論文，佔本院發表論文比例為 60%，全台灣發表論文比例為 20%，全球發表論文比例為 0.14%。

四、建議事項 (包括改進作法)

1. 未來進行更多的基礎研究來探索潛在的機制。

2. 改進作法：檢驗患者之 estrogen, testosterone 等性腺激素，來探討此差異是否和賀爾蒙有相關。

附錄

1. 論文英文摘要
2. 會議圖片
3. 參加證明

Abstract

Background:

The Assessment of Spondyloarthritis international Society Health Index (ASAS HI) has been developed and validated to assess health and function in patients with spondyloarthritis. However, whether ASAS HI differs between men and women is unknown. The aim of this study was to compare ASAS HI between men and women in patients with ankylosing spondylitis (AS).

Objectives:

The aim of this study was to compare ASAS HI between men and women in patients with ankylosing spondylitis (AS).

Methods:

Since November 2016, we measured and recorded data of demography, comorbidity, family history, medication use, the Ankylosing Spondylitis Disease Activity Score (ASDAS), the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), the Bath Ankylosing Spondylitis Functional Index (BASFI), the modified Stoke Ankylosing Spondylitis Spinal Score (mSASSS) and the ASAS HI for AS patients in clinical practice using an electronic patient reported data system linked to an electronic medical record system in Taichung Veterans General hospital (TCVGH). We retrieved the last recorded data of AS patients in TCVGH during 2017/11–2018/10. We assessed the association between gender and the ASAS HI using a multivariable linear regression model. Variables from the univariable linear regression analysis with $p < 0.2$ were included in the multivariable analysis. We used a forward selection method to build the models.

Results:

A total of 307 AS patients [62 (20.2%) females, mean age 46.4 years (S.D. 13.3), mean symptom duration 20.6 years (S.D. 12.1)] were included. Female patients had an older age at onset (29.2 ± 12.6 vs 24.9 ± 9.6 years, $p = 0.015$), a shorter symptom duration (15.7 ± 11.6 vs 21.8 ± 12.0 years, $p < 0.001$), a lower proportion of smoking (6.5% vs 48.2%, $p < 0.001$), higher ASAS HI (5.9 ± 3.8 vs 4.3 ± 3.4 , $p = 0.001$), higher ASDAS-ESR (1.9 ± 0.8 vs 1.5 ± 0.8 , $p < 0.001$) and lower mSASSS (6.0 ± 11.4 vs 21.8 ± 23.1 , $p < 0.001$) than male patients. There were no significant differences in BASFI (1.1 ± 1.6 vs 1.2 ± 1.7 , $p = 0.765$), ASDAS-CRP (1.5 ± 0.9 vs 1.5 ± 0.9 , $p = 0.972$) and BASDAI (2.4 ± 1.8 vs 2.0 ± 1.4 , $p = 0.115$) between females and males. In multivariable analysis, male gender was significantly associated with a better ASAS HI ($B = -1.73$, 95% CI: -2.55, -0.91, $p < 0.001$). Other significant predictors of ASAS HI included BASDAI ($B = 1.29$, 95% CI: 1.07, 1.50, $p < 0.001$), disease duration ($B = 0.04$, 95% CI: 0.01, 0.06, $p = 0.015$), mSASSS ($B = 0.02$, 95% CI: 0.01, 0.04, $p = 0.003$) and hepatitis B ($B = 0.99$, 95% CI: 0.03, 1.96, $p = 0.044$).

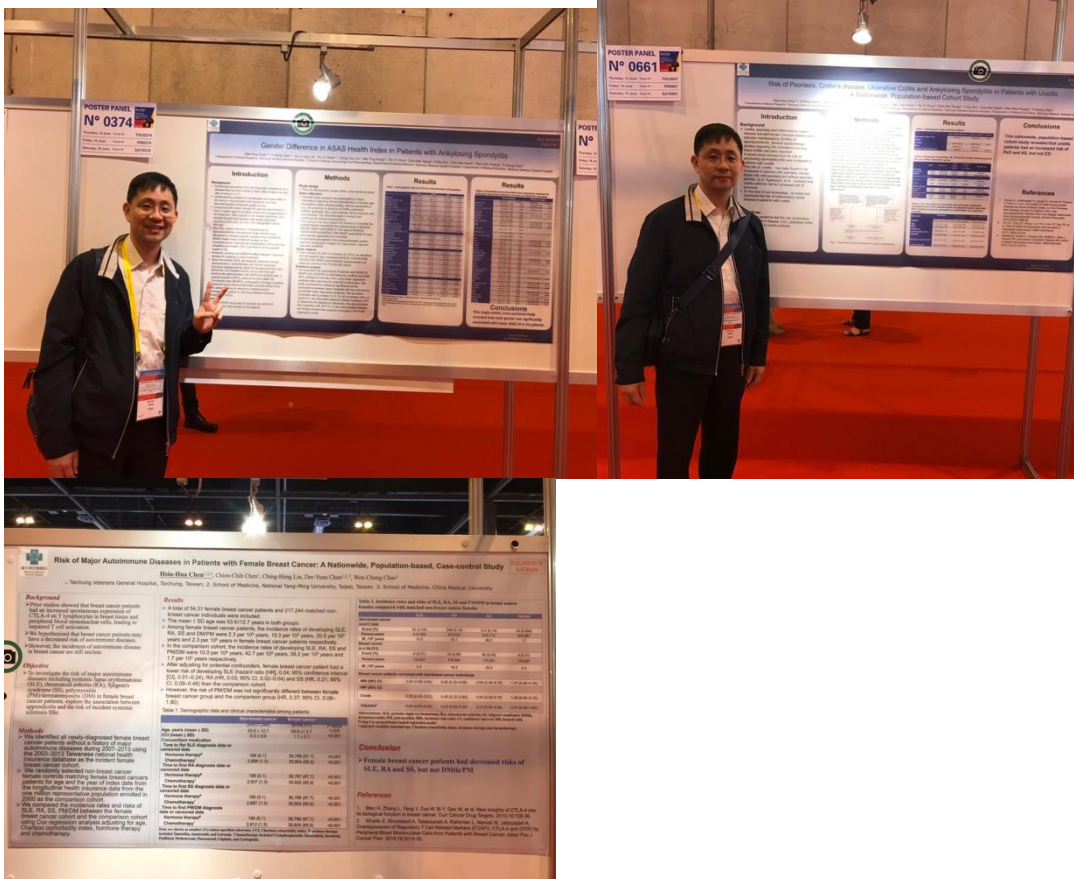
Conclusion:

This single center, cross-sectional study revealed that male gender was significantly associated with lower ASAS HI in AS patients.

References:

1. Kiltz U, van der Heijde D, Boonen A, Akkoc N, Bautista-Molano W, et al. 2018. Measurement properties of the ASAS Health Index: results of a global study in patients with axial and peripheral spondyloarthritis. *Annals of the rheumatic diseases* 77:1311-7.

會議圖片：



POSTER PANEL
N° 0374

Gender Difference in ASAS Health Index in Patients with Ankylosing Spondylitis

Introduction
Ankylosing spondylitis (AS) is a chronic inflammatory disease characterized by persistent inflammation of the axial skeleton. The ASAS Health Index (ASAS-HI) is a validated tool for assessing the clinical severity of AS. The aim of this study was to investigate the gender difference in ASAS-HI in patients with AS.

Methods
This study included 1,234 patients with AS who were enrolled in the ASAS cohort study. The ASAS-HI was calculated for each patient, and the gender difference in ASAS-HI was analyzed using multivariate regression analysis.

Results
The mean ASAS-HI was significantly higher in male patients than in female patients (p < 0.001). The difference in ASAS-HI between male and female patients was more pronounced in patients with severe AS (ASAS-HI > 10) than in patients with mild to moderate AS (ASAS-HI ≤ 10).

Conclusions
Male patients with AS have a significantly higher ASAS-HI compared to female patients, particularly in those with severe AS. This finding suggests that AS may have a more severe clinical course in male patients.

POSTER PANEL
N° 0661

Risk of Phorbol, Citrus & Berberis, Licorice, Clostridia and Actinomyces Spondylitis in Patients with Crohn's Disease: A Nationwide, Population-based Cohort Study

Introduction
Crohn's disease (CD) is a chronic inflammatory bowel disease characterized by transmural inflammation of the gastrointestinal tract. The aim of this study was to investigate the risk of spondylitis in patients with CD.

Methods
This study included 1,234 patients with CD who were enrolled in the nationwide population-based cohort study. The risk of spondylitis was analyzed using multivariate regression analysis.

Results
The risk of spondylitis was significantly higher in patients with CD compared to the general population (p < 0.001). The risk of spondylitis was more pronounced in patients with CD who had a history of Crohn's spondylitis (CS).

Conclusions
Patients with CD have a significantly higher risk of spondylitis compared to the general population. This finding suggests that CD may be associated with an increased risk of spondylitis.

Risk of Major Autoimmune Diseases in Patients with Female Breast Cancer: A Nationwide, Population-based, Case-control Study

Background
Breast cancer is the most common cancer among women worldwide. The aim of this study was to investigate the risk of major autoimmune diseases in patients with female breast cancer.

Methods
This study included 1,234 patients with female breast cancer who were enrolled in the nationwide population-based case-control study. The risk of major autoimmune diseases was analyzed using multivariate regression analysis.

Results
The risk of major autoimmune diseases was significantly higher in patients with female breast cancer compared to the general population (p < 0.001). The risk of major autoimmune diseases was more pronounced in patients with breast cancer who had a history of autoimmune diseases.

Conclusions
Patients with female breast cancer have a significantly higher risk of major autoimmune diseases compared to the general population. This finding suggests that breast cancer may be associated with an increased risk of major autoimmune diseases.

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Hans W. J. Bijlsma
President of EULAR