Figure 1. Flow diagram of the systematic literature search and review, using the PRISMA method, of records of syndemic with application in RMDs.

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AB0809 PADUA PREDICTION SCORE COMBINED WITH SERUM ALBUMIN FOR THE IDENTIFICATION OF VENOUS THROMBOEMBOLISM OF HOSPITALIZED PATIENTS IN THE DEPARTMENT OF RHEUMATOLOGY

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Background: Venous thromboembolism (VTE) includes thrombotic disease of venous system, but primarily includes lower extremity deep vein thrombosis (DVT) and pulmonary embolism (PE). Population-based epidemiological studies have shown an association between systemic autoimmune diseases and VTE[1]. The Padua prediction score(PPS) is a new 20-point risk assessment model proposed by Professor Barbar et al[2] in 2010. A large number of researches have shown that low serum albumin concentration is associated with an increased risk of VTE [3],but there is a lack of studies on serum albumin in VTE, and there are no reports on PPS in rheumatology inpatients.

Objectives: To investigate the status of VTE in patients in the department of rheumatology, and to explore the value of PPS combined with serum albumin in the identification of VTE in this patient population.

Methods: Baseline data of inpatients in rheumatology department were collected at Sichuan Provincial People's Hospital from September 2018 to September 2020. Occurrence of VTE was compared between high and low risk groups. PPSs were analyzed in VTE and non-VTE patients. Multivariate logistic regression was used to analyze the independent risk factors of VTE. The receiver operating characteristic curve was used to evaluate the probability of value of rheumatic inpatients with VTE assessed by PPS,serum albumin and PPS with serum albumin. $P < 0.05$ indicates that the difference was statistically significant.

Results: A total of 2282 patients were included in this study, and 50(2.2%) had symptomatic VTE. Among the symptomatic VTE cases,38(1.6%) had DVT only,8(0.4%) had PE only, and 4(0.2%) were diagnosed with DVT and PE. PPSs in VTE and non-VTE groups were 3.00(2.00-6.00) and 2.00(1.00-2.00) respectively ($P < 0.05$). One hundred and eighty-eight cases was divided into high-risk group of VTE ($PPS \geq 4$), while 2094 cases ($PPS < 4$) were in the low-risk group. Logistic regression analysis showed that known thrombophilic condition, history of VTE, reduced mobility, and D-dimer were independent risk factors of VTE in rheumatology patients, the odd ration(OR) values were 161.90, 26.08, 8.73,and 1.04. Serum albumin was the independent protection factor [OR= 0.92(95%CI:0.87~0.98)]. The AUC of PPS model, serum albumin model and the combined predictive model were 0.77, 0.75, 0.84, respectively. The difference between the combined prediction model and PPS model was statistically significant ($Z = 3.813$, $P < 0.05$). The optimal sensitivity of PPS and serum albumin models is 60%, 82%, respectively, and the optimal specificity of is 82.5%,58.6%, respectively. The combination model corresponds to a sensitivity of 62% and a specificity of 90.4%.

Conclusion: The incidence of symptomatic VTE was relatively higher in hospitalized patients in rheumatology department. Serum albumin was the protective factor. The combination of albumin and PPS can improve the accuracy of screening for VTE in rheumatology in-patients.

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AB0810 COST-EFFECTIVENESS ANALYSIS OF THE CLINICAL APPROACH FOR RA PATIENTS IN THE EARLY PHASE VERSUS THOSE IN THE ESTABLISHED PHASE FROM A FOURTH-LEVEL HEALTH SERVICE PROVIDER INSTITUTION IN COLOMBIA

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Background: Rheumatoid arthritis (RA) is a chronic systemic inflammatory disease that without treatment causes disability, pain, quality of life impairment, and premature mortality. It causes significant economic repercussions on patients, their families, and the health system. The costs of RA for Sanitary Systems are described in terms of medications and hospitalization. Also, the cost of treatment for patients whose disease was not adequately controlled from an early stage may involve joint replacement surgery and prolonged hospitalizations.

Objectives: To determine and analyze the cost-effectiveness of the clinical approach to rheumatoid arthritis in a cohort of patients in the early phase versus a cohort of patients in the established phase from a fourth-level Health Service Provider Institution in Colombia, from the perspective of the third-party payer with a time horizon of six-months.

Methods: An economic evaluation of the cost-effectiveness of the clinical approach was carried out in the early phase versus the established phase in a cohort of patients from May 2013 until December 2018, with rheumatoid arthritis from a fourth-level Health Service Provider Institution in Colombia, from the perspective of the third-party payer with a time horizon of six-months. The costs and effectiveness of each of the phases were estimated. A decision tree model was created, and the incremental cost-effectiveness ratio was calculated. The deterministic and probabilistic sensitivity analysis was performed.

Results: The early phase clinical approach for patients with rheumatoid arthritis represents savings of approximately 600 USD per patient in remission or low disease activity level in the first 6 months of follow-up from the perspective of the third-party payer.

Conclusion: The clinical approach to rheumatoid arthritis in the early phase is a less costly and more effective alternative versus established phase and generates savings for the third-party payer with a time horizon of six-months.

Figure 1. Acceptability curve

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