

## Primary sjogren's syndrome diagnosed from extraglandular manifestation

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Primary Sjogren's syndrome (pSS) is a autoimmune disorder that primarily affects epithelial tissue characterized by lymphoplasmacytic infiltration of the exocrine glands. The patients may develop a extraglandular manifestation such as tubulointerstitial nephritis, hepatitis, or myositis due to systemic involvement of pSS which mark disease prognosis and can cause mortality. Recently, we experienced a patient who had acute kidney injury due to tubulointerstitial nephritis, autoimmune hepatitis and myositis, finally diagnosed as pSS. The 73 year-old female presented with oliguria, abdominal distension and edema. She had a diabetic nephropathy and hypertension. Abdomen CT scan showed advanced liver cirrhosis with ascites. Hepatocellular pattern of hepatitis and acute kidney injury had not improved with conservative care, therefore we biopsied the liver and kidney. Kidney showed tubulointerstitial nephritis, infiltrated with CD3, CD8, CD68, CD138 positive cells in immunohistochemistry. Liver showed chronic hepatitis with cirrhosis, marked plasma cell infiltration in portal area and serologic markers of hepatitis B and C were all negative, hence, we presumably diagnosed her as autoimmune hepatitis and started oral prednisolone. She also complained progressive weakness of lower extremities and bone scan showed increased uptake in both thighs and the symptom accompanied with elevated muscle enzyme. We also biopsied thigh muscle and it showed mild inflammatory cell infiltration in the endomysium, suggestive of inflammatory myopathy. Anti SS-A (Ro) and SS-B (La) which were checked during the work up of autoimmune hepatitis, were strong positive, therefore we started to have a suspicion for pSS. Salivary gland scan showed markedly impaired function of both submandibular glands, Shirmer test was positive, and lip biopsy showed focal lymphocytic sialadenitis. Finally, we diagnosed her as pSS with kidney, liver, and muscle involvement. She was discharged with fully recovered renal function, normalized hepatic enzyme and partially recovered muscle power continued on steroid treatment.

## Threshold of blood pressure for the prediction of preeclampsia in pregnant women:a cohort study

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**Background and Objectives:** Preeclampsia is a dangerous pregnancy-related complication. Blood pressure (BP) during early pregnancy could be a good marker for preeclampsia development. However, the threshold values have not been evaluated. Therefore, we performed the current cohort study. **Methods:** Among 11,059 pregnant women who delivered a baby in a tertiary care hospital between 2003 and 2015, 3925 who had BP and dipstick proteinuria data, and did not have comorbidities were included. BP before 20 weeks' gestation was used as the main factor to determine preeclampsia development. For visual evaluation of non-linear associations, a restrictive cubic spline curve was used. For threshold evaluation, the area under the receiver operator curve was used with the Youden index. **Results:** For the 3925 women, mean age was 32.6 years; 65.7% of women were nulliparous and 12.1% had a multifetal gestation. Mean systolic BP and diastolic BP before 20 weeks' gestation were 113.2 mm Hg and 63.9 mm Hg, respectively. The calculated threshold values were 118.3 mm Hg for systolic BP (sensitivity 0.50 and specificity 0.70) and 66.9 mm Hg for diastolic BP (sensitivity 0.53 and specificity 0.69). In a multivariate logistic regression analysis, systolic BP  $\geq 118.3$  mm Hg or diastolic BP  $\geq 66.9$  mm Hg was independently associated with preeclampsia development (adjusted odds ratio, 2.151; 95% confidence interval, 1.400 - 3.306;  $p < 0.001$ ). **Conclusions:** The threshold values of systolic BP and diastolic BP for preeclampsia development were 118.3 mm Hg and 66.9 mm Hg, respectively. Clinicians need to care for women more intensively if their BP is above these levels. Future prospective studies are needed to confirm our study results.