

中文題目：血清中 pentraxin-3 及 TNF-like weak inducer of apoptosis (TWEAK) 濃度可預測急性代償不全之肝硬化病人發生感染的嚴重程度

英文題目：Serum pentraxin-3 and TNF-like weak inducer of apoptosis (TWEAK) predict severity of infections in acute de-compensated cirrhotic patients

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Background: Pentraxin-3 (PTX₃) and soluble TNF-like weak inducer of apoptosis (sTWEAK) are new candidate prognostic markers for co-morbidities and mortality in various inflammatory diseases. Acute de-compensation of cirrhosis is characterized by acute exacerbation of chronic systemic inflammation. Recently, increased circulating PTX₃ levels had been reported in nonalcoholic steatohepatitis patients and positively correlated with disease severity. This study aims to explore serum PTX₃/sTWEAK levels and their relationship with clinical outcomes in cirrhotic patients with acute de-compensation.

註解 [W1]: PTX3 in NASH 那篇文章是用 plasma PTX3, 所以我把 serum level 改成 systemic level

Methods: We analyzed serum PTX₃/sTWEAK levels in relation to in hospital and 3-month new clinical events and survivals in cirrhotic patients with acute de-compensation.

Results: During admission, serum PTX₃/sTWEAK levels were significantly higher in acute de-compensated cirrhotic patients than controls and positively correlated with protein-energy wasting (PEW), new infection, long hospital stay, high medical costs, and high mortality. During 3-month follow-up, acute de-compensated cirrhotic patients with high serum PTX₃/sTWEAK levels have more episodes of unplanned re-admission and high 3-month mortality. On multivariate analysis, high PTX₃/sTWEAK levels and PEW were independent risk factors for high mortality.

Conclusion: High serum PTX₃/sTWEAK levels and PEW are common in cirrhotic patients with acute de-compensation. As compared with low serum PTX₃ and sTWEAK cases, cirrhotic patients with high serum PTX₃/sTWEAK levels have higher probability of new severe infection, severe sepsis, septic shock, type 1 hepatorenal syndrome, in-hospital and 3-month follow-up mortalities. So, high serum PTX₃/sTWEAK levels on hospital admission predict disease severity and case fatality in cirrhotic patients with acute de-compensation.

Keywords:

Pentraxin-3; soluble TNF-like weak inducer of apoptosis; protein-energy wasting