



To News Editor  
For Immediate Release

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**Metabolic Syndrome  
Can Increase the Risk of Liver Cirrhosis in Chronic Hepatitis B by over Fourfold**

Chronic hepatitis B is the commonest cause of liver cancer in Hong Kong. Liver cirrhosis greatly increases the risk of liver cancer in hepatitis B patients. Determination of the risk factors of liver cirrhosis is important to identify high risk patients who may need anti-viral treatment and intensive cancer surveillance.

In Hong Kong, approximately 10%-15% of the population has metabolic syndrome, which is defined as central obesity plus any of the following 2 features: high serum triglyceride, low serum high density lipoprotein (HDL) cholesterol, hypertension and diabetes mellitus. In 2006, the Center for Liver Health at The Chinese University of Hong Kong (CUHK) demonstrated that metabolic syndrome is associated with fatty liver disease, which may progress into liver cirrhosis. However, the relationship of metabolic syndrome and chronic hepatitis B on the risk of liver cirrhosis is still unclear.

Between 2006 and 2008, a research team led by Professor Henry Chan Lik-yuen, Chairman of the Center for Liver Health at CUHK, conducted a study receiving referrals of chronic hepatitis B patients from all primary care and hospital clinics in Hong Kong to investigate the effect of metabolic syndrome on liver cirrhosis. All patients were carefully assessed in the Prince of Wales Hospital for the presence of metabolic syndrome and liver cirrhosis by transient elastography, Fibroscan, a non-invasive method that can detect liver cirrhosis with high accuracy. Among the 1,466 patients recruited into this study, 188 (13%) patients had metabolic syndrome. The commonest components of metabolic syndrome were central obesity (41%) and high blood pressure (45%), while other components including hypertriglyceridemia (13%), low HDL cholesterol (18%) and diabetes mellitus (14%) were present in a smaller proportion of patients. 46 of 188 (24%) patients with metabolic syndrome versus 141 of 1,278 (11%) patients without metabolic syndrome had liver cirrhosis.

The results also showed that the presence of more components of metabolic syndrome in the same patient was associated with a higher risk of liver cirrhosis. A patient with 3 components of metabolic syndrome had the risk of liver cirrhosis increased by 3-fold and one with all 5 components had the risk of liver cirrhosis increased by 4.5-fold.

In summary, the large-scale study has clearly shown that metabolic syndrome is associated with liver cirrhosis in chronic hepatitis B. CUHK therefore recommends doctors taking care of chronic hepatitis B patients to proactively look for the evidence of metabolic syndrome and its components. As chronic hepatitis B patients with metabolic syndrome are more likely to harbor liver cirrhosis, diagnostic workup for cirrhosis is warranted in these cases because of the important therapeutic and surveillance implications.



致新聞編輯  
請即發放

### 代謝綜合症增加乙肝病人患肝硬化機會逾四倍

在香港，慢性乙型肝炎（乙肝）是導致肝癌的最常見病因。乙肝患者若有肝硬化，其患上肝癌的風險亦會大幅增加。因此，了解肝硬化的風險因素對於分辨高風險病人以接受抗病毒藥物治療及肝癌普查為十分重要。

中央肥胖、高密度脂蛋白膽固醇過低、三酸甘油脂過高、血壓過高和血糖過高是代謝綜合症的五種風險因素。當病人有中央肥胖，以及餘下四項風險因素的其中二項，便會被診斷為代謝綜合症患者，本港約有 10%-15%的人口患有此病。香港中文大學（中大）肝臟護理中心於 2006 年發表了代謝綜合症與脂肪肝的研究報告，證實了兩者關係密切，但代謝綜合症與慢性乙肝的關係，醫學界目前則尚未清楚。

有見及此，由中大肝臟護理中心主任陳力元教授領導的研究隊伍於 2006 至 08 年間進行了一項臨床研究，調查代謝綜合症與肝硬化的關係。研究對象是 1,466 名由家庭醫生及醫院門診所轉介的乙肝患者。中心除了為所有患者詳細檢查代謝綜合症外，亦利用無創及準確度高的肝纖維化掃描器，為病人測試肝硬化的程度。在這些參加者中，共有 188 位（13%）患有代謝綜合症，當中最常見的代謝綜合症風險因素是中央肥胖（41%）及血壓過高（45%）。至於三酸甘油脂過高、高密度脂蛋白膽固醇過低及和血糖過高的患者則較少，分別為 13%、18% 及 14%。

在 188 名被驗出患有代謝綜合症的乙肝患者當中，24%（46 位）同時患有肝硬化，至於在 1,278 名沒有代謝綜合症的病人中，有 11%（141 位）患上肝硬化。

研究亦同時發現，肝硬化的風險會隨著病人患上越多項代謝綜合症風險因素而有所增加。患有三種風險因素的病人，肝硬化風險比正常人高三倍；而同時患有五種風險因素的病人，肝硬化風險則比正常人高出達四點五倍。

總括來說，是項大型研究清楚地顯示，代謝綜合症會影響乙肝患者患上肝硬化的風險。中大建議，醫生應主動替乙肝患者檢查是否有代謝綜合症的症狀，亦應該為乙肝及代謝綜合症的病人作肝硬化檢查，進一步確定是否需要進行肝癌普查，如每半年一次的超聲波及甲胎蛋白測試。

二零零九年三月九日