

**Conclusion:** This case illustrates that mercury-associated minimal change disease can remit spontaneously after stopping the offending agent without the need for chelating agents or steroid treatment.

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#### 0249

##### Geriatric Nephrology: A 10-year Review of a Single-center Renal Biopsy in Patients Aged 75 Years and Older

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**Objective:** Studies on biopsy-proven renal disease in the very old (75 years and older) are limited in Hong Kong. The aim of this study was to examine the spectrum of renal diseases and their clinical presentations in the very old undergoing percutaneous native renal biopsy.

**Methods:** All native renal biopsies (n = 43) performed in patients aged 75 years and older by Nephrologists of the United Christian Hospital, Hong Kong from January 2004 to December 2014 were retrospective analyzed.

**Results:** A total of 700 percutaneous native renal biopsies were performed. 43 percutaneous native renal biopsies (6.14% of total native renal biopsies) were done in patients 75 years and older, including 25 males and 18 females. Primary glomerular diseases (60.47%) occurred more frequently than secondary glomerular diseases (39.53%). For primary glomerular diseases, idiopathic membranous nephropathy (11.63%) and minimal change disease (11.63%) were the most frequent diagnosis, followed by IgA nephropathy (9.30%) and focal segmental glomerulosclerosis (9.30%). For secondary glomerular diseases, amyloidosis (9.30%) and secondary membranous nephropathy (9.30%) were the most frequent diagnosis followed by hypertensive arterionephrosclerosis (6.98%) and drug induced acute interstitial nephritis (4.65%). The causes of amyloidosis were multiple myeloma (75%) and rheumatoid arthritis (25%). Secondary causes of membranous nephropathy are malignancy (75%) and chronic infection (25%). The clinical presentations were nephrotic syndrome in 51.16% of patients, asymptomatic urinary abnormalities in 25.58%, acute kidney injury in 18.60%, and acute nephritic syndrome in 4.65%.

**Conclusion:** This study is the first renal biopsy series to analyze patients aged 75 years and older in Hong Kong, and the results obtained from this study provide updated information in the very old with renal disease. Nephrotic syndrome is the main indication for renal biopsy. Amyloidosis and secondary membranous nephropathy are the most frequent histological diagnosis of secondary glomerular diseases.

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#### 0253

##### Correlation of Single Nucleotide Polymorphism in Phospholipase A2 Receptor 1 with Membranous Nephropathy in the Chinese Han Population

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**Objective:** M-type phospholipase A2 receptor (PLA2R) has been shown as a target autoantigen in idiopathic membranous nephropathy (IMN) adults. The correlation between genetic polymorphisms of PLA2R1 and the susceptibility to IMN as well as anti-PLA2R autoantibodies in the Chinese Han population is still unknown. This study aimed to investigate whether single nucleotide polymorphisms (SNPs) of PLA2R1 correlated with the development of IMN in the Chinese Han population.

**Methods:** One hundred and sixty-five patients with IMN, 59 patients with secondary membranous nephropathy (SMN) and 241 healthy individuals were enrolled. SNP rs35771982 of PLA2R1 was genotyped using polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP). The

correlation between PLA2R1 SNP and clinical parameters of IMN as well as the presence of anti-PLA2R autoantibodies were analyzed.

**Results:** The genotype and allele distributions at SNP rs35771982 in PLA2R1 were significantly different among three groups ( $P < 0.001$ ). The frequency of CC genotype at rs35771982 was higher in IMN patients than in healthy controls and SMN patients ( $P < 0.001$  and  $P = 0.001$ , respectively) and increased the risk for IMN (odds ratio = 0.43, 95% confidence interval = 0.28–0.65). IMN patients with CC genotype showed higher positive rate of anti-PLA2R autoantibodies than those with CG or GG genotype ( $P = 0.003$ ). No influence of SNP rs35771982 on disease remission was revealed.

**Conclusion:** SNP rs35771982 of PLA2R1 may contribute to the development of IMN and correlate with anti-PLA2R autoantibodies, thus playing an important role in the pathogenesis of IMN.

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#### 0256

##### Successfully Treated Case of Allopurinol-induced Severe DRESS Syndrome with Granulomatous Interstitial Nephritis

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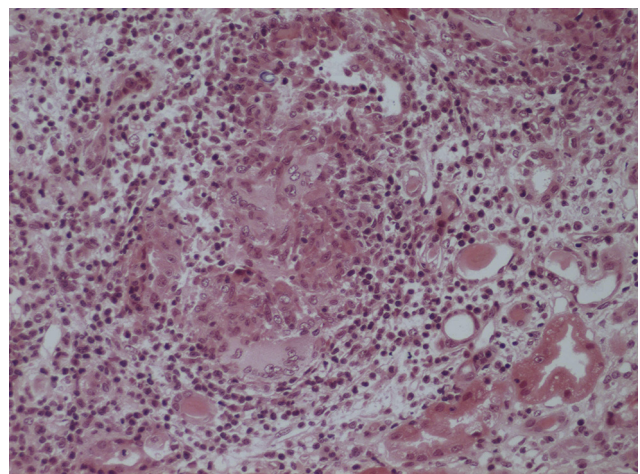
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**Background:** Drug reaction with eosinophilia and systemic symptom (DRESS) is a rare and life-threatening adverse drug-induced reaction. Allopurinol may induce severe DRESS syndrome.

**Case Summary:** We report a successfully treated case of a 41-year-old man with allopurinol-induced severe DRESS syndrome. The patient was hospitalized for acute rash, high fever ( $> 38^{\circ}\text{C}$ ) and liver and renal involvement, and was considered as DRESS syndrome according to the RegiSCAR inclusion criteria. The patient further was scored as 6 with the RegiSCAR scoring system for high fever (score 0), atypical lymphocytes (score 1), skin involvement ( $> 50\%$  body surface area, score 1; classic skin rash suggesting DRESS, score 1), liver involvement (score 1), renal involvement (score 1), resolution more than 15 days (score 0), and evaluation of other potential causes (negative results of antinuclear antibody, blood culture, serology for HAV/HBV/HCV and chlamydia/mycoplasma, score 1), and he met seven of ten items according to Japanese criteria, which both indicated the definite diagnosis of DRESS syndrome. His renal function was impaired severely, and the renal histopathological manifestation was granulomatous interstitial nephritis (Figure 1). The patient improved significantly with corticosteroid treatment and hemodialysis (Table 1). During the 1-year follow-up, the patient relapsed once due to sudden cessation of steroids, but clinical remission was achieved after readministration of steroids.

**Conclusion:** Timely intensive treatment may improve the prognosis of patients with allopurinol-induced severe DRESS syndrome. Gradual withdrawal of steroids after clinical remission is necessary.



**Figure 1.** Kidney biopsy showed granulomatous interstitial nephritis (hematoxylin & eosin, 200 $\times$ ).