### **Photo Quiz**

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## A 13-year-old Male with Generalized Edema

A 13-year-old boy was admitted in emergency room with sever generalized edema, hypertension and gross hematuria. He just had a positive history of upper respiratory tract infection 2 weeks ago. His laboratory tests revealed glomerular hematuria, nephrotic range proteinuria, low complement levels (both C3 and C4 levels) and normal renal function. Supportive therapy was started for him but after 4 weeks, clinical symptoms were not resolved and complement levels remained in low levels of normal. Kidney biopsy was performed and findings are compatible with c3 glomerulopathy with membranoproliferative histologic pattern (figure 1). His symptoms were resistant to prednisolone and cyclosporine therapy, and two months later he showed pluresia and non-infected skin lesions in both legs.

### What is your diagnosis?



# A 13-year-old Male with Generalized Edema

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In histologic pattern (figure 1) in all glomerululi, lobular accentuation, endocapillary and mesangial hyper cellularity are seen. There are mesangial matrix expansion and GBM thickening in all glomeruli and C3 deposition in GBM and mesangium which is compatible with membranoproliferative glomerulonephritis and c3 glomerulopathy. Electron microscopy picture shows dense deposit disease. As described above first laboratory investigations for SLE was negative but because of deterioration of symptoms (serositis, skin and renal involvement) we recheck lupus serologic markers that became positive, he fulfilled lupus criteria. Although SLE is one cause of secondary MPGN but diagnosis of SLE requires correlation of clinical and laboratory findings and only glomerular changes does not make the diagnosis. We recommend reevaluation for SLE in any patient with nephritic nephrotic syndrome and persistent signs and symptoms.

#### **References**

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