Morphological diversity of pretibial myxedema and its evolving process: A retrospective study of 216 cases
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Pretibial myxedema (PTM) was characterized by excessive deposit of hyaluronan and hyperplasia of local skin and always associated with a group of autoimmune thyroid diseases. Its pathogenesis and outcome were unclear. 216 cases with PTM were retrospectively reviewed to disclose its morphologic features and mechanism of evolving process and outcome. Primary lesions at onset were nodules, swelling erythema and papules that evolved into nodule, plaque, diffuse swelling, tumor, mixture and elephantiasis. Different levels of serum TRAb caused different variants. The highest was in elephantiasis and the lowest in nodule. Sub-variants were caused by local injury. In the evolving process existed 4 stages including active, stable, sclerotic and receding stages. Serum TRAb level at active stage was statistically higher than stable, sclerotic and receding stages, as were the cases in the perivascular infiltration of CD8+ and CD4+ lymphocytes. The TRAb level at remission after steroid was lower than that before therapy but the level increased when PTM relapsed. The fluctuation of autoimmunity was the cause of lesional activation and stability or relapse and remission. Predicted outcome of 6 variants by drawing curves of serum TRAb levels in the 16-year course corresponded with clinical outcome that nodular variant subsided spontaneously with the steady decline of TRAb level on the basis of lower level but other 5 variants worsened intermittently with repeats of active and stable stages in the fluctuation of autoimmune activity on higher level, cases at sclerotic stage persisting with stable TRAb level. PTM needed early treatment to avoid severe variants.

Biography
Changgui Lan has completed his MD from Luzhou Medical College and MSc from West China Hospital of Sichuan University and Postdoctoral studies from Columbia University Medical Center and New York University, School of Medicine. He is the Director of Department of Dermatology at China National Nuclear Corporation 416 Hospital and the 2nd Affiliated Hospital of Chengdu Medical College, Sichuan Province, China. He has published more than 30 papers in English journals and Chinese journals. He has specialized in research of pretibial myxedema from epidemiology, clinical manifestation and diagnosis to treatment. He has published 5 papers about pretibial myxedema and his PTM patient numbers are the biggest in the world.

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