Background: Scabies is relatively common in tropical areas and in developing countries due to poor hygiene practices and poverty, including Indonesia. Norwegian scabies is rare and atypical, but is highly infectious and easily transmitted. Compared to classical scabies, patients with Norwegian scabies may lack the characteristic rash or itching. Rather, it is characterized by hyperkeratosis and crusting of the skin due to profuse proliferation of mites resulting from an altered host response towards the infestation. The risk factors are immunocompromised conditions, diabetes mellitus, neurologic illnesses, and connective tissue diseases.

Observation: We reported three cases of Norwegian scabies. First patient is a female of 45 years old with history of diabetes since 5 years. Secondly is a female of 39 years old with history of using long-term oral corticosteroid for her systemic lupus erythematosus disease. Lastly is a male of 44 years old with amyotrophic lateral sclerosis who had poor hygiene practice. All patients complained of thick crust on some parts of their bodies like face, neck, trunk, arms, legs, hands, and feet. On direct microscopic examination with 10% potassium hydroxide, a number of mites, eggs, and feces (scybala) were detected. The patients should be isolated and their surrounding be disinfected. Keratolytic agents are used for removal of hyperkeratotic skin and penetration of scabisidal agents. In these cases we used a combination of topical 3% salicylic acid and 5% permethrin cream, which showed clinical improvement with no side effects.

Key message: The diagnosis and treatment of Norwegian scabies are challenging because of hyperkeratotic skin and high parasitic load. Suspicion of the disease and early diagnosis are very important for preventing endemic outbreaks and providing relevant treatments. The wrong diagnosis may cause serious complications such as superinfection of lesions and septicemia.