A case of amyotrophic lateral sclerosis complicated with decbitus

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Introduction

Amyotrophic lateral sclerosis (ALS) causes the denaturation of upper motor neurons and lower motor neurons and is characterized by systemic progressive amyotrophy. Sensory disturbances, eye movement disorders, bladder problems, rectal disorders, and decbitus are known as four major negative signs. We experienced an example of ALS that caused decbitus. We report this patient's special background.

Case report

The patient was a 67-year-old man. There was nothing important of note in the family medical history. Schizophrenia occurred in 1995. Therefore, treatment began. The patient experienced weight loss and a decrease in physical strength from about the autumn of 2009. Rising became difficult from early 2010. The symptoms extended to all limbs. In November, 2010, he was hospitalized with aspiration pneumonitis. Anarthria developed in the same period. He was received at Tokushima National Hospital in April and diagnosed with ALS. His height was 172cm, and the weight was 72 kg. The limbs' muscular strength decreased on both sides to a moderate degree. After hospitalization, systemic muscle weakness progressed. He gradually became bed-ridden. Difficulty expectorating sputum increased. On September 17, 2015, he underwent tracheotomy. Nourishment was supplied by nasal intubation. On January 11, 2017, decbitus appeared in the sacral region (Figure 1). Photograph of the decbitus taken in the sacral region. The medication was as follows; riluzole 50 mg /day, risperidon 1 mg /day, milnacipran hydrochloride 15mg/day, chromepromazine hydrochloride 50mg/day, phenobarbital 100mh/day, flunitrazepam 2mg/day. Laboratory findings were as follows, Hb 10.1g/dl, RBC 313×10^4 /μl, WBC 3900 /μl, PLT 28.5×10^4 /μl, TP 7.1 g/dl, Alb 3.6 g/dl, AST 25IU/L, ALT 35IU/L, γ-GTP 174IU/L, TG 41 mg/dl, BS 92 mg/dl, BUN 12.5 mg/dl, Creatinin 0.26 mg/dl, Na 127 mEq/L, K 4.1 mEq/L, CCl 90 mEq/L, CRP 1.99/mg/dl.

A pelvic CT scan (Figure 2) showed gluteus atrophy. The decbitus part becomes high density.

Discussion:

Generally, decbitus is considered to be a negative sign in ALS [1]. Although there is few it, there are few case reports [2]. In late years a change of the neurotrophic factor is found in the skin tissue of the ALS, and In late years the change of the neurotrophic factor is found in a skin tissue of the ALS. It has been reported that ciliary neurotrophic factor (CNTF) and insulin-like growth factor I (IGF-I) increase with the epidermis and skin adnexa remarkably [3,4]. Stainability increases in the epidermis tumor necrosis factor-α (TNF - α) [5]. IGF-I is closely related to wound healing [6,7]. It is said that IGF-1 is significantly low in schizophrenia patients [8]. Our patient had schizophrenia before the ALS onset and received medical treatment. Decbitus might appear by low level of the IGF-I than this.

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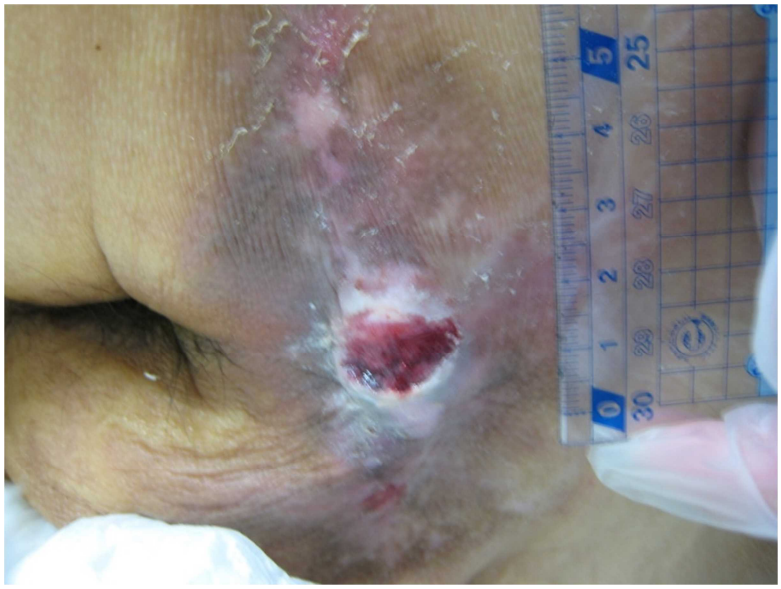

Figure 1. Photograph of the decbitus taken in the sacral region.

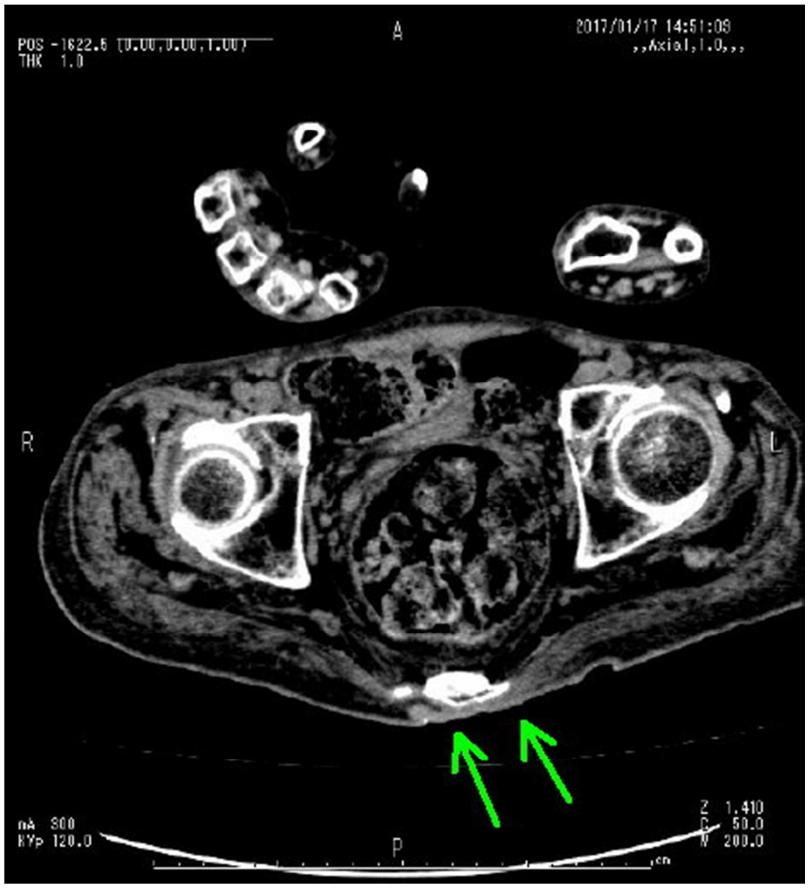

Figure 2. CT of the decbitus part