

中文題目：嚴重肺炎在一位喝完日日春汁液的病人上

英文題目：Severe pneumonia in the patient drank *Catharanthus roseus* juice

作者：鄧紀剛¹，廖偉志²，周家卉³，何茂旺³

服務單位：¹中國醫藥大學附設醫院內科部，²中國醫藥大學附設醫院胸腔暨重症系，³中國醫藥大學附設醫院感染科

Abstract

Catharanthus roseus was one of the best-studied medicinal plants. Both Vinblastine and Vincristine were powerful anticancer drugs, which were isolated from the pantropical plant *Catharanthus roseus*. Vinorelbine, another semi-synthetic vinca-alkaloid which had demonstrated broad clinical antitumour activity in a weekly intravenous schedule. The main hematological toxicity of Vinorelbine was neutropenia. We report a patient with severe pneumonia after he drank the homemade *Catharanthus roseus* juice.

Case Report

This 54-year-old male with a history of chronic obstructive pulmonary disease (COPD) and bronchiectasis presented to our emergent department (ED) because of 1-day history of epigastric pain. He has a smoking history of 30 pack-years and currently smokes 10 cigarettes per day. He was diagnosed with COPD with initial presentation of exertion dyspnea and chest tightness since one year ago. His COPD was controlled with long-acting-beta-agonists (LABA) initially and recently shifted to inhaled corticosteroids (ICS) plus LABA because progressive dyspnea and chest tightness. One day ago, he drank the homemade juice derived from *Catharanthus roseus* (Figure 1) that someone told him it could improve his healthy condition. However, epigastric dull pain developed and he also had poor appetite and constipation. He denied fever, chills, cough, sputum, or skin rash. He visited our ED where respiratory distress and neutropenia (white blood count (WBC): 1000/uL and Neutrophilic Segment: 40.4 %) were noted. His HIV antibody revealed nonreactive. He was admitted for further management.

During hospitalization, he suffered from high fever and progressive respiratory distress on third day of hospitalization. Chest radiograph revealed bilateral lower lung with alveolar process and ground glass pattern. (Figure 2) Followed-up laboratory data revealed pancytopenia (WBC < 150/uL, Hemoglobin: 11.0 g/dL, and platelet: 72000 /uL) and acute kidney injury. Because of severe pneumonia complicated with septic shock and acute respiratory failure status, endotracheal tube intubation with mechanical ventilator support and vasopressors were performed. He was transferred to intensive care unit (ICU) for further care. He then received whole body computer tomography (CT) scan (Figure 3), which revealed air space opacification and consolidation in both

lungs. The sputum culture initially yielded *Klebsiella pneumoniae*. After antibiotics treatment and Filgrastim injection, his neutropenia improved after 3rd day of ICU care. The bilateral pneumonia also got recovered gradually. He discharged on the 32nd day of hospitalization with normal performance status and normal WBC and renal function.

Discussion

Catharanthus roseus was a raw material of anticancer drugs Vinblastine, Vincristine and Vinorelbine. It shared the same toxicity and side effects like leukopenia, febrile neutropenia, neutropenic infection, nausea, vomiting, diarrhea, neuroconstipation, stomatitis and esophagitis. Our patient suffered from poisoning by drinking of *Catharanthus roseus* juice and complicated with leukopenia, severe pneumonia, septic shock, and respiratory failure. The patient recovered after leukopenia improved. We treated his severe pneumonia and stable his hemodynamic status and adequate antibiotics.

Only a few people knew the toxicity of *Catharanthus roseus*. Theoretically, *Catharanthus roseus* can't be a kind of herbal medicine. We must let more people to know the toxicity of *Catharanthus roseus* and prevent the complications of poisoning of *Catharanthus roseus*.

Figure

Figure 1. *Catharanthus roseus*



Figure 2. Chest radiograph showed ground glass pattern in bilateral lower lungs

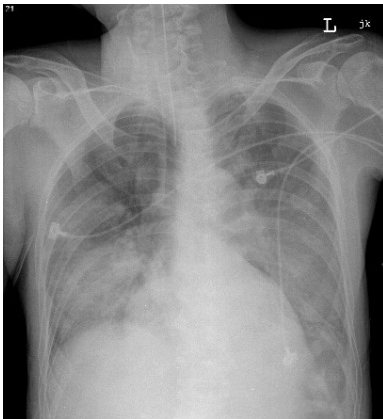


Figure 3. Chest CT showed consolidation in bilateral lower lungs

