

## 파라쿼트 중독후 발생한 간질성 폐섬유화증의 성공적 치료 2례

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### Successfully Treated Two Cases of Pulmonary Fibrosis Due to Paraquat Poisoning

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**Introduction:** Paraquat poisoning can cause severe multiple organ failure, including kidney, liver, lung, adrenal, and central nervous system. Respiratory failure is a frequent cause of death in moderate to severe poisoning. We report two cases of pulmonary fibrosis from paraquat poisoning who were successfully treated by steroid pulse therapy.

**Case 1:** A 45-year-old Korean man visited emergency room for the management of paraquat poisoning. The result of urine dithionite was strong positive, and the level of plasma paraquat was 37  $\mu\text{g}/\text{mL}$ . Gastric lavage was done, and antioxidant such as D-penicillamine and allopurinol was administrated. He received methylprednisolone pulse therapy (1000 mg/day, total 2 days) and cyclophosphamide (5 mg/kg/day, total 2 days), and immediate hemoperfusion was initiated. During the renal improvement, the patient experienced pulmonary fibrosis on the 10th day of admission. Methylprednisolone pulse therapy (500 mg/day, total 3 days) was started, and then the haziness of the chest PA improved. The patient was discharged with good renal function, and result of chest PA was clear 3 months later.

**Case 2:** A 66-year-old Korean man visited emergency room for the management of paraquat poisoning. The result of urine dithionite was strong positive, and the level of plasma paraquat was 26  $\mu\text{g}/\text{mL}$ . Gastric lavage was done, and antioxidant such as D-penicillamine and allopurinol was administrated. He received methylprednisolone pulse therapy (1000 mg/day, total 2 days) and cyclophosphamide (5 mg/kg/day, total 2 days), but immediate hemoperfusion was not initiated because of refusal of the treatment. The creatinine level increased up to 2.6 mg/dL on the 4th day of admission, fortunately, the renal function improved from then. However, the patient complained dyspnea on the 11th day of admission, and the haziness was detected on chest PA. Methylprednisolone pulse therapy (500 mg/day, total 3 days) was started. And then, the patient was discharged with good renal and pulmonary function. The result of chest PA was normal 1 month later.

**Conclusion:** We report two cases of pulmonary fibrosis from paraquat poisoning who were successfully treated with steroid pulse therapy. In case of pulmonary fibrosis secondary to paraquat poisoning, steroid pulse therapy could be effective.

**Key Words:** 파라쿼트 중독, 간질성 폐섬유증  
Paraquat poisoning, Pulmonary fibrosis