

## Acute renal failure following poisoning by juniper tar (cade oil)

Dr Imane Failal<sup>1</sup>, Dr Sanae Ezzaki<sup>1</sup>, Pr benyounes ramdani<sup>1</sup>

<sup>1</sup>*Chu Ibn Roshd, Casablanca, Morocco*

### Introduction:

Juniper tar "Cade oil" is distilled from the branches of *Juniperus oxycedrus*. Despite its known toxicity and which is linked to its phenol content, this oil continues to be used in traditional medicine. The toxicity of phenol affects a wide variety of systems, such as the central and peripheral nervous systems, the cardiovascular, hepatic and biliary systems, the skin and the respiratory tract.

### Materials and methods :

We report the case of severe systemic toxicity after local administration of cade oil in an infant. This clinical case shows that the use of products can expose to a risk of poisoning confirming that the skin of the newborn can absorb various molecules with serious accidents.

### Observation:

This is a 12-month-old infant; the youngest of a chip shop of three, from a well-followed pregnancy, a vaginal delivery, well vaccinated according to the national immunization program, with no pathological history individuals. Hospitalized in the pediatric resuscitation department for respiratory and neurological distress following poisoning with cade oil, applied locally to the wrists, elbows forehead and head. The application was thick and extensive. Half an hour later, the infant developed respiratory distress, hypotonia and convulsions without fever. On physical examination, the infant was unconscious, 75% desaturated under a high concentration mask with an impregnable blood pressure requiring intubation. The biological investigations revealed a renal insufficiency in 52mg / l of creatinine plasma with a rate of urea to 3.5 g / l, a rate of potassium and sodium correct; metabolic acidosis (pH = 7.28; HCO<sub>3</sub> = 16 mmol / l and PCO<sub>2</sub> at 32 mm Hg), absence of hepatic cytolysis, and all other laboratory tests were normal.

The treatment was mainly based on rapid and complete skin decontamination with soap and water to reduce the skin absorption of oil. In addition, symptomatic treatment based on mechanical ventilation, hemodynamic correction, basic acid disorders, and rehydration.

### Result and follow-up

The evolution was favorable, the infant was extubated on D10 of his hospitalization, with a progressive recovery of the renal function under rehydration which passed from 52mg / l of plasma creatinine to 5.6mg / l.

The follow-up after 6 months was remarkable, and the neurological and psychomotor developments were normal.

### Conclusion:

Juniper tar (cade oil) is one of the most used essential oils in traditional Moroccan medicine. Several cases of intoxication have been described in the literature.