Objective: To study the epidemiological and management changes of patients with acute intoxication seeking medical care in Spanish PEDs in the last decade.

Methods: cohort comparative study. We analyzed the circumstances of the poisonings and the management in different PEDs included in the Clinical Toxicologic Working Group of the SEUP in two periods of time (Group A: 2001 Jan- 2002 December, 17 PEDs. Group B: 2008 October- 2009 September, 37 PEDs).

Results: Related to the visits to the Spanish PEDs poisoning rate was similar in both groups (0.28% vs 0.30, n.s.), and there were no differences related to age and sex. Drugs were the most involved substances (54.7% vs 56.2%, n.s.). Poisonings related to ethanol involving increased significatively (5.9% vs 12.3%, p=0.005) whereas those related with household products decreased (28.9% vs 18.5%, p=0.01). Rate of patients receiving any treatment in the PED was similar in both groups (51.7% vs 56.9%, p=0.28), mainly activated charcoal (32.3% vs 35.4%; p=0.52). No patient in the Group B received ipecac (vs 7.8% in the Group A, p=0.001). Patients managed as outpatients decreased (64.6% vs 54.6%, p=0.025). No patient in group B was admitted to the ICU (vs 1.5% in group A, p=0.31).

Conclusions: The rate of poisonings attended in Spanish PEDs in the last decade remains stable. Drugs are the main agent involved, although poisonings related to ethanol have increased and those related with household products decreased. Activated charcoal is the most commonly used gastrointestinal decontaminant and ipecac is no longer used. More than half of the patients are discharged home after initial evaluation and treatment in the PED.