

PARACETAMOL-INDUCED HYPOTENSION IN CRITICALLY BURNED PATIENTS - BASIC ANALGESIA WITH RISK? (P121)

*Lambrecht E.¹

¹UZ Gent, IC Burn Unit, Gent, Belgium

Introduction and methods: a small observational study - with PiCCO monitoring - to elucidate the mechanism of hypotension following I.V. administration of paracetamol to critically burned patients on the burn unit. In our small study we continually measured blood pressure, cardiac output and peripheral vascular resistance for 3 h after 1 gr of intravenous paracetamol in 35 patients (2012 - 2015).

Paracetamol is recommended as first-line pharmacological therapy by a variety of international guidelines for a multitude of acute and chronic painful conditions. Whereas paracetamol is generally considered a safe analgesic and antipyretic drug, one should not underestimate the possible adverse effect on blood pressure in the critically burned patients. There are several hypotheses that link the pharmacodynamics to the transient physiological effect on blood pressure. Recent reviews show clinically relevant hypotension occurred in 10 - 33 % of febrile patients requiring fluid administration or an initiation of therapy with vasoactive medication.

Results: Analysis of data from 35 patients (with PiCCO) showed that systolic arterial pressure and mean arterial pressure was reduced for the first hour following administration of paracetamol in 31 % of these patients (SAP and MAP fell by an average of 11 per cent and 6 per cent with maximum falls of 36 per cent). We excluded patients who were still fluid responsive and those with haemodynamic instability.

Conclusion: I.V. administration of paracetamol was associated with reduced arterial blood pressure, which can be caused by a reduction of cardiac output or peripheral vascular resistance or their combination. Further study is needed to elucidate the mechanism by which paracetamol reduces cardiac output in some responders.