

Trauma 2018: Predictability of successful transarterial embolization in pelvic fracture bleeding based on patient initial presentation - Cheng-Cheng Tung - Yuan Rung Hospital, Taiwan

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Background & Purpose: Pelvic fracture bleeding generally destines hemorrhagic shock. Trans-arterial-embolization (TAE) is regarded as the most useful treatment. However, there are still some initial presentations of the patient impacting the effectiveness of TAE in pelvic fracture bleeding. This retrospective study is to explore profitability of available initial presentations for TAE in pelvic fracture bleeding.

Method: There were 27 charts reviewed retrospectively. The definition of TAE failure was that the patient eventually received an exigent laparotomy due to uncontrolled bleeding after TAE or that the patient was defunct. We analyzed available initial presentations like age, gender, systolic-blood-pressure, heart rate, respiratory rate, body temperature, Glasgow-coma-scale (GCS), injury-severity-score (ISS) and associated-injuries through Pearson's correlation and independent t-test when the patient received therapeutic TAE. Odds-ratio preceded the cut-off point

disclosed through an independent t-test for successful TAE and used to assess the congruity.

Result: Successful TAE didn't associate with age and gender. Hierarchical statistically significant associations between successful TAE and initial presentations were the patient's body temperature, associated injury, respiratory rate, systolic-blood-pressure, GCS and ISS. Odds-ratios for all statistically significant initial presentations were within a 95% confidence interval.

Conclusion: Profitability of available initial presentations for TAE is hypothermia prevention with upholding a body temperature of more than 36 °C, determining associated injuries within two organ-systems, keeping the respiratory rate around 22 per minute, sustaining systolic-blood-pressure around 90 mmHg, maintaining a heart-rate of around 100 per-minute as well as the permissiveness of a minor head injury with the GCS more than 13 and a moderate ISS of less than 20.