890 Predictive Factors for Mortality Following Trauma & Orthopaedic Surgery in The Covid-19 Pandemic. The Manchester Equation

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**Introduction:** Covid-19 caused many service changes including limitations on operations due to potential increased mortality risk to patients. We report our findings from Trauma & Orthopaedic (T&O) surgical mortality through this period and the effectiveness of using a scoring system (The Manchester Equation) to predict likelihood of mortality.

**Method:** We reviewed all T&O admissions that underwent surgical intervention during the height of the pandemic. We recorded numerous factors for each patient including mortality and Covid status. From this we created a scoring system which is the product of Covid status, Anaesthetic type, Medical co-morbidities and other medical factors and ASA Score. We then analysed the findings to determine whether the score could be predictive of mortality rate.

**Results:** Of 123 patients undergoing surgery 6 deaths were observed (mean score of 51.3) compared to 117 patients surviving (mean score 31.9), p = 0.001. A score of less than 32 carried a 0% chance of death whereas a score of 32 or more resulted in a 14.6% mortality rate (p = 0.01).

**Conclusion:** The Manchester Equation can be used to help predict the mortality rate of T&O surgery in the presence of Covid-19 and may be useful for clinical decision making and consent purposes.