

322 Clinical Factors Predictive of Both Successful and Unsuccessful Arterial Embolization in The Management of Lower Gastrointestinal Bleeding

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Aim: To develop a model of clinical factors that may predict: (1) technically and clinically successful embolization of a bleeding vessel at Digital Subtraction Angiography (DSA) for lower gastrointestinal bleed (LGIB); (2) a negative DSA in the presence of positive CT-mesenteric angiography (CTMA) for LGIB.

Method: A retrospective cohort study of all DSAs conducted with intent for embolization for acute LGIB over a 10-year period was undertaken. Pre-procedural and intra-procedural clinical variables were evaluated using uni- and multi-variate analysis.

Results: 123 DSAs were evaluated. Technical success was 81% (64/78) with clinical success 78%. Technical success was associated with super-selective approach, contrast extravasation on CT, haemoglobin drop, anatomical source and time from CT to DSA on univariate analysis. On multivariate analysis time from CT to DSA was significant with a higher success probability within 120 minutes with different factors being salient depending on degree of delay. Clinical success was only associated with APTT (<27.5s). Technical failure from a negative DSA following a positive CTMA was associated with anatomical source, haemodynamic stability, platelet count and time from CT to DSA on univariate analysis. The latter three remained so on multivariate analysis.

Conclusions: A triaging approach to utilising emergency DSA may be helpful. If prolonged delay between a positive CT and DSA is anticipated, with haemodynamic stability and a near normal platelet count, the DSA may not be fruitful. Technical success may be more likely if DSA occurs within 120mins. Clinical success may be more likely if APTT is within normal range.