

The effectiveness of Bone Anchored Maxillary Protraction (BAMP) compared with an untreated control: A multi-centre randomized controlled trial

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Aim: The aim of this multi-centre randomized controlled trial is to compare the effectiveness of BAMP compared with a no treatment/control group in terms of: need for orthognathic surgery, skeletal forward movement of the maxilla, correction of reverse overjet and patient self-esteem and oral aesthetic opinion.

Method: Sixty patients aged 11.5 – 14.5 years old, referred to 8 U.K. NHS hospitals will be randomly allocated , stratified for gender, into either a BAMP surgical group or a control/no treatment group. The inclusion criteria are: Age 11.5 to 14.5 years old, a class III skeletal pattern with maxillary retrusion and a reverse overjet of at least 1mm with three or more incisors in crossbite in retruded contact position.

Outcomes: The primary outcomes will be: need for orthognathic surgery, skeletal forward movement of the maxilla, correction of reverse overjet and patient self-esteem and oral aesthetic opinion. Secondary outcomes for the BAMP group will include: Operating time, patient discomfort, post-operative infection rates, miniplate failure rate. The data will be compared between baseline, 1 year and 3 years later.