INTERVENTIONS TO FACILITATE MBS IN NON-AMBULANT PATIENTS

CHRISTINE STIER
UNIVERSITY MEDICINE MANNHEIM, GERMANY

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Original article

Fast-track rescue weight reduction therapy to achieve rapid technical operability for emergency bariatric surgery in patients with life-threatening inoperable severe obesity – A proof of concept study

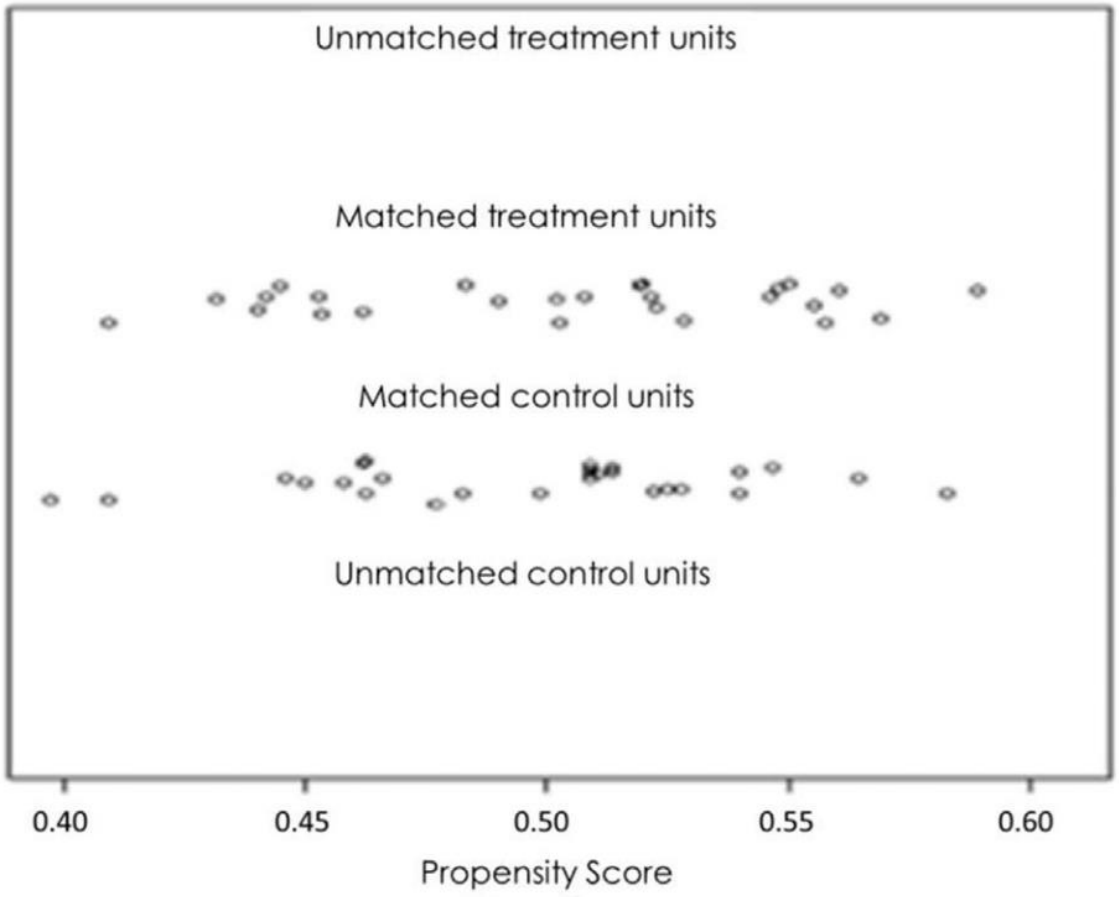
Christine Stier [a, b, c, d, *], Ann-Cathrin Koschker [d], Mia Kim [e, f], Raphael Stier [g], Sonja Chiappetta [h], Jürgen Stein [i]

Internal Rating Scale: Necessity of immediate hospitalization with fast-track rescue weight reduction bridging therapy to obesity surgery is indicated from a total of 14 points upwards or a full score for physical or pulmonary status.

Individual status	Age	>40	1
		>50	2
	Gender	Female	0
		Male	2
	BMI	Obesity class III > 40 kg/m^2	2
		Obesity class III > 50 kg/m^2	3
		Obesity class III > 60 kg/m^2	4
		Obesity class III > 65 kg/m^2	5
		Obesity class III > 70 kg/m^2	6
		Obesity class III > 75 kg/m^2	8
Functional status		Independent	0
		Partially dependent	2
		Totally dependent	4
		Wheelchair-dependent	6
		Immobile	8
Physical status (modified according to ASA classification)		Normally healthy patient (according to ASA 1)	0
		Mild systemic disease (according to ASA 2)	2
		Severe systemic disease (according to ASA 3) including hypertension, dyslipidemia (well controlled under medication) and NAFLD	4
		Severe systemic disease with threat to life (according to ASA 4) including uncontrolled hypertension, dyslipidemia and NAFLD with severe hepatomegaly	6
		Severe systemic disease with threat to life and urgent need for weight loss surgery (ultima ratio) to improve physical condition (according to ASA 5)	8
Pulmonary status		Not breathless with physical activity (two flights of stairs)	0
		Breathless with physical activity (two flights of stairs)	2
		Confirmed sleep apnea	3
		Obesity hypoventilation syndrome	4
		Permanently dependent on oxygen supply	6
		Tracheotomy	8
Type 2 diabetes status		Oral antidiabetic drug(s): HbA1c < 7.5%	1
		Insulin-dependent: HbA1c < 7.5%	2
		Oral antidiabetic drug(s): HbA1c 7.5%–10%	4
		Insulin-dependent: HbA1c 7.5%–10%	6
		HbA1c > 10%	8

ASA, physical status classification system of the American Society of Anesthesiologists (ASA); NAFLD, non-alcoholic fatty liver disease.

Propensity score matched groups: Intragastric Balloon versus medical treatment (GLP-1 + AA-infusion)



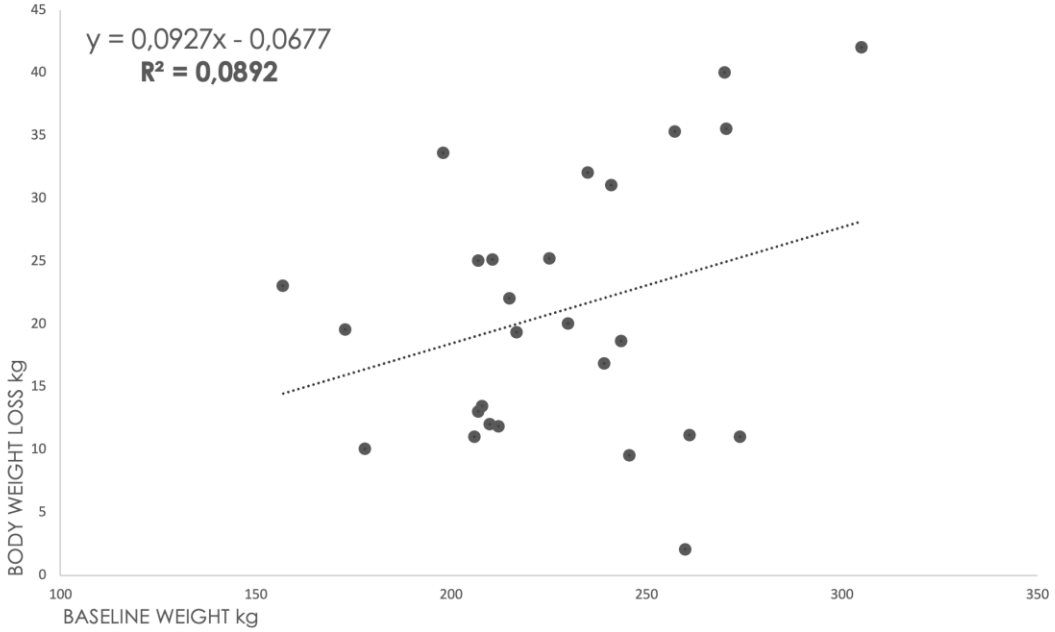
Baseline patient data

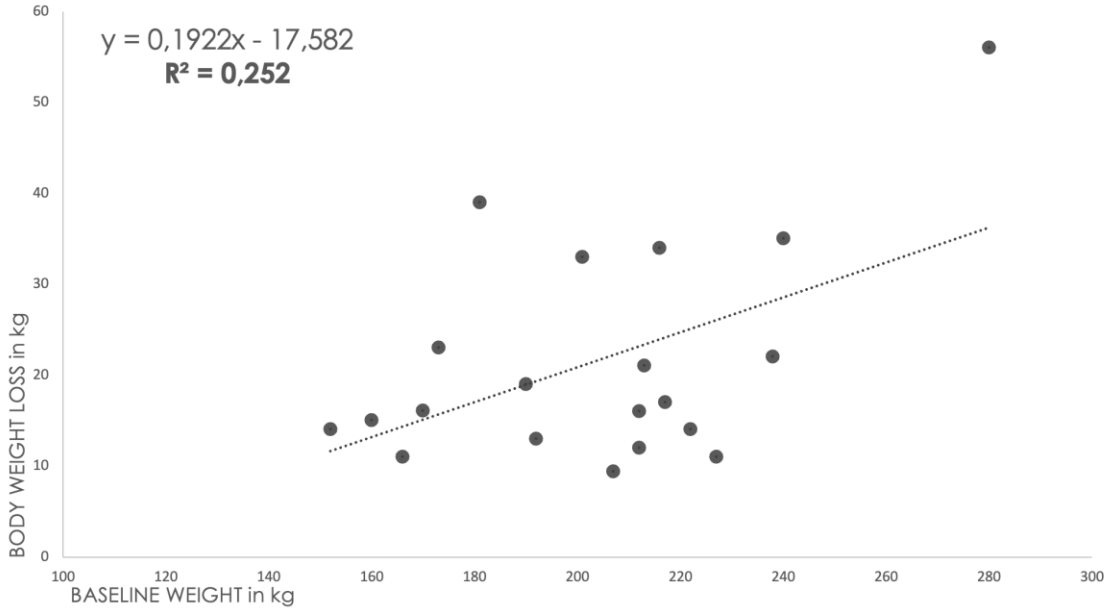
27P (IGB) 14fm/13m	Mean	SD	Min	Max	20P (MCT) 14fm/13m	Mean	SD	Min	Max	
Age years	40,48	6,43	29	54	Age years	42,7	9,50	29	54	n.s.
Height cm	171,37	9,82	155	187	Height cm	175	11,39	157	198	n.s.
Basic BMI kg/m²	77,47	8,34	61,3	95,7	Basic BMI kg/m²	73,29	8,72	60,2	94,6	n.s.
Basic Weight kg	226,77	33,96	157	305	Basic Weight kg	229,55	38,30	166	338	n.s.
Excess weight kg	156,18	28,08	97	225	Excess weight kg	155,4	33,13	152	280	n.s.

Intragastric balloon group (Treatment duration: **6 months**)versus medical treated group (Treatment duration: **20,1d**):

27P (IGB) 14fm/13m	Mean	SD	Min	Max	20P (MCT) 14fm/13m	Mean	SD	Min	Max	
Outcome BMI kg/m²	70,05	8,62	51,1	87,4	Outcome BMI kg/m²	66,17	5,95	55,5	78,4	n.s.
Outcome Weight kg	207,16	31,61	134	267	Outcome Weight kg	203,45	31,36	152	280	n.s.
BMI drop	7,34	3,17	3,2	12,3	BMI drop	7,12	3,46	3,6	16,2	n.s.
Weight loss kg	21,06	10,53	2	40	Weight loss kg	26,1	12,75	11	58	p>0,01 CIs 90%
EWL %	13,88	8,52	1,08	44,3	EWL %	13,87	5,27	6,4	25,1	n.s.

Multiple linear regression (baseline weight, weight loss), Group 1 (medical treated group).
Multiple linear regression (baseline weight, weight loss): Group 2 (control group – intragastric balloon).





Aus der chirurgischen Klinik
der Medizinischen Fakultät Mannheim
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„Validation of a novel score for urgent bariatric and metabolic surgery“

Inauguraldissertation
zur Erlangung des medizinischen Doktorgrades
der
Medizinischen Fakultät Mannheim
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zu
Heidelberg

TAKE HOME

There are clear criteria:

For non-ambulatory patients as a bridge to surgery, endoscopy, especially intragastric balloon therapy (nowadays alternatively endoscopic gastroplasty)

should be performed

provided there is no urgent need for immediate surgical rescue weight loss.

=> **Thus defining the bariatric emergency patient**

THANK YOU FOR YOUR KIND ATTENTION

christine.stier@umm.de