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Perspective

History of the MGB and OAGB operations

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1. The beginning

In 1997, Dr. Robert Rutledge, as a trauma surgeon at University of North Carolina, was presented with a gun-shot wound to the stomach, which required intestinal and antral resection, gastrojejunostomy and duodenal exclusion. This reconstruction led to his ensuing mini-gastric bypass (MGB) operation, with a long lesser curvature channel from *below* crow's foot. He performed the MGB (Fig. 1) on consenting morbidly obese patients, with results superior to his prior laparoscopic Roux-en-Y gastric bypass (RYGB). The MGB was less technically demanding than the RYGB. In 2001, he submitted a paper on his first 1,274 MGBs to me as Editor-in-Chief of *Obesity Surgery* [1].

Because of some controversy, I contacted Dr. Rutledge who invited me for 10 days to his hospital in Statesville, NC. I observed his masterful 35-min MGB (many per day), with patients walking about post-op on the day of surgery. His MGB was the same as is performed today. I viewed his follow-up clinics and attentive patient care. In 2005, Rutledge reported his 6-year results of 2,410 MGBs [2]. Meanwhile, he trained Kuldeepak S. Kular (who had previously been trained in the RYGB), Cesare Peraglie and David Hargroder, who have now performed in total > 5,000 MGBs.

Proud surgeons who had been trained to perform the complex RYGB, with its two anastomoses, were prejudiced against Rutledge and his simpler procedure, which they postulated would cause bile reflux and cancer. Indeed, Dr. DeMaria led his junior surgeons to publish a paper on complications of the MGB [3], which were largely based on patients of Dr. Steven Olchowski, who had never seen Dr. Rutledge perform the MGB and constructed a short channel which included fundus.

The MGB increased internationally, and comparisons with the RYGB and the sleeve gastrectomy (SG) have shown superiority of the MGB in terms of simplicity, rapidity, resolution of co-morbidities (especially diabetes), improvement in quality of life, and ease of revision [4–14].

2. The name MGB

In the 1970s and 1980s, mini-laparotomy (with a short abdominal incision) became a prevalent technique for certain general surgical operations. In the 1990s, mini-invasive techniques were developed as superior methods in surgery. Laparoscopic abdominal operations usually used 5 ports, but techniques were developed to reduce the number of ports, called mini-laparoscopy. As such, the name mini-gastric bypass as a simplified operation of the RYGB has been an appropriate name.

3. The OAGB

In 2002, Professor Miguel Carbajo in Spain, after having > 10 years experience with the RYGB, read Dr. Rutledge's publication, and performed a modification of the MGB to avoid potential reflux (Fig. 2); he sutured the afferent jejunal limb laterally to the gastric pouch. Dr. Rutledge was an invitee of Dr. Carbajo in 2004 to the Congress of the Spanish Society of Obesity (Fig. 3), where the two versions of these mainly malabsorptive procedures were presented. Carbajo called his modification One-Anastomosis Gastric Bypass (OAGB) or Bagua (Bypass Gastrico de una Anastomosis). In 2005, Carbajo published his excellent results of the OAGB, followed by further reports [15,16]. A comparison of the MGB and OAGB found similar excellent results [17].

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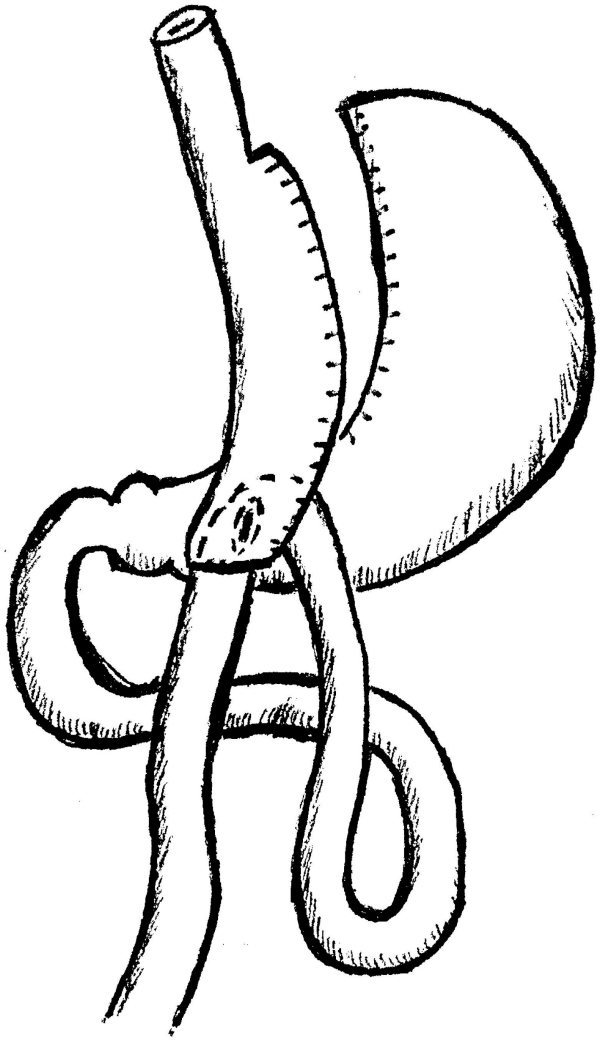

Fig. 1. Diagram of MGB showing vertical division from below crow's foot up to left of angle of His, with antecolic gastro-jejunostomy.

3.1. Formation of the MGB-OAGB club

In 2015, the MGB Conclave was held in New Delhi under Arun Prasad and Kuldeepak Kular, with > 300 experienced attendees. Occasionally, the MGB had been called SAGB (Single Anastomosis Gastric Bypass), but SAGB had been used in the literature for “Silicone Adjustable Gastric Banding” or “Swedish Adjustable Gastric Band”. The name Omega Loop Gastric Bypass was problematic, because most Americans do not know what “omega” is. At the New Delhi congress, > 90% of surgical attendees voted to maintain the name MGB.

At our subsequent 2015 Congress in Vienna, the similarity in principles of the MGB of Rutledge and the OAGB of Carbajo led to formation of the MGB-OAGB International Club (Fig. 4).

Of interest, Tolone [18] and Saarinen [19] demonstrated that the MGB has a low-pressure channel which does not produce reflux, unlike the SG [20,21]. Development of carcinoma after MGB or OAGB is almost unknown [22].

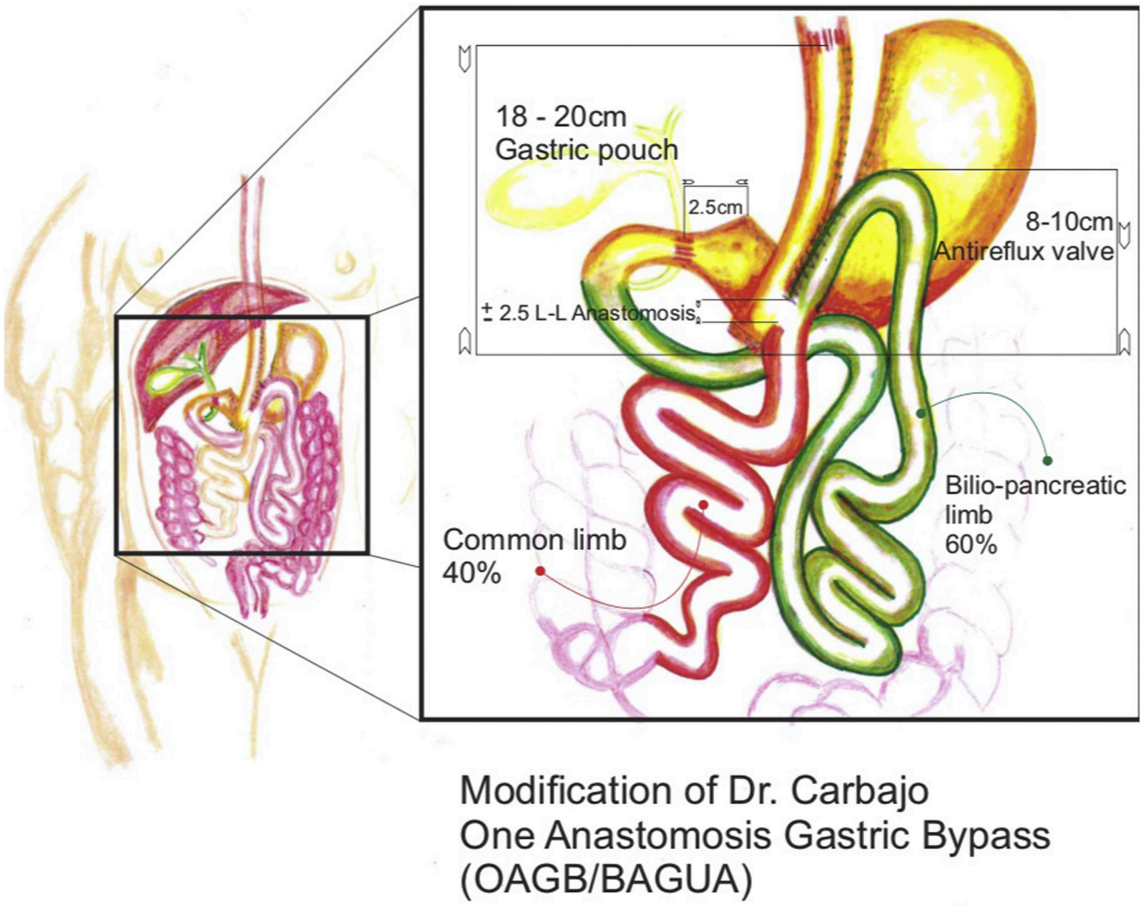

Fig. 2. OAGB with antecolic latero-lateral anastomosis between pouch and afferent loop which is suspended above the anastomosis by a continuous suture, with final fixation of the loop's apex to the bypassed stomach.

3.2. Arrangement with international journal of surgery

Because of the multiple names used for these operations, which dilute their reports, the MGB-OAGB Club has arranged with the *IJS* to act as our official journal, using the proper names – MGB or OAGB – for the two operations, as appropriate.

Data statement

There is no need for a data statement in an editorial.

Ethical approval

Editorial article. Ethical approval is unnecessary for this paper.

Sources of funding

None.

Conflicts of interest

We have no conflicts of interest.

Guarantor

Dr. Deitel accept full responsibility for the work and contents of this paper.

Fig. 3. Invitee Dr. Rutledge presenting MGB at Spanish Congress, 2004.

Fig. 4. Logo of MGB-OAGB club.

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