



## BARIATRIC SURGERY at Pomerado Hospital

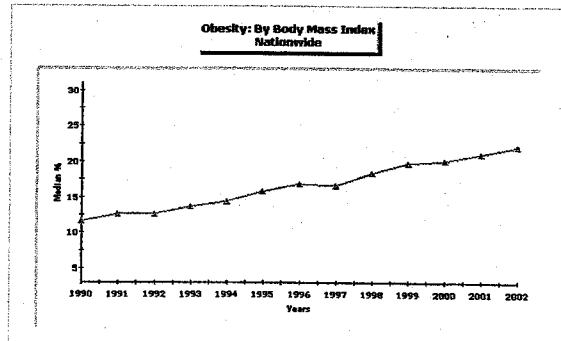
Charles D. Callery, MD, FACS  
Kyle Potts, MD, FACS

### Obesity Epidemic



- ▣ 65% adults are overweight (BMI 25-30)
- ▣ 23% obese (BMI 31-35)
- ▣ Morbid obesity...
  - \* >100 pounds excess (BMI > 36 and above)
  - \* 4% or 12,000,000 in USA
- ▣ Involuntary disease
- ▣ All age groups affected
- ▣ Numbers rapidly increasing

### Statistics Increasing Obesity

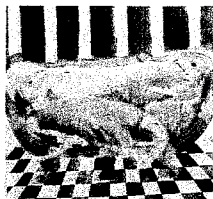


### Causes of Obesity



#### Genetics

- Environmental factors
- Social factors
- Psychological factors




1,504,000  
CHILDREN  
ENTERED  
EVERY  
YEAR  
YOU ARE  
NOT  
ALONE

### Complications of Obesity

- Physical...Nothing Fits
- Discrimination and Isolation
- Economic Losses
- Depression
- Medical


## Cardiovascular Complications

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- Diabetes (20%)
    - Retinopathy, neuropathy, stroke, renal failure, peripheral vascular disease, amputation
  - Hypertension (35%)
  - Elevated Cholesterol
  - Elevated Triglycerides
  - Heart attack, heart failure
- 


## Pulmonary Complications

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- Shortness of Breath
  - Asthma (15%)
  - Pneumonia
  - Obstructive Sleep Apnea (20%)
    - Fatigue, Pickwickian Syndrome
    - Memory, attitude problems
    - Headache
    - Ventricular hypertrophy
- 


## More Medical Complications

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- GERD (38%)
    - Heartburn
    - Esophagitis
    - Aspiration
  - Stress incontinence (~35%)
  - Arthritis/arthralgias, back pain (25%)
  - Abdominal wall hernias
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## Still More Medical Complications

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- Cancer
    - Breast, colon, uterus, prostate, GB
  - Gall bladder stones
  - Polycystic ovary syndrome, infertility
  - Acne, skin boils
  - Pseudotumor cerebri
    - Headache, ringing in ears, cranial nerve dysfunction, CSF rhinorrhea
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## The Big Problem:

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Methods for voluntary weight loss and control. NIH Technology Assessment Conference Panel. Consensus Development Conference, 30 March to 1 April 1992.



## Obesity Surgery Candidate (NIH), 1991

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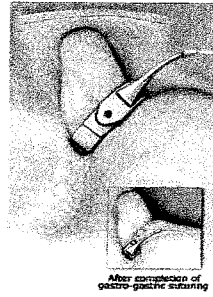
- VBG, Gastric Bypass
  - Heavy Enough
    - BMI  $\geq 35$  with comorbidity
    - BMI  $\geq 40$
  - Failed non operative approaches
  - Psychologically stable
  - Best possible medical condition
  - Multidisciplinary program
- 

### 3 Types of Obesity Operations

- Restriction
- Restriction plus rearrangement
- Malabsorption



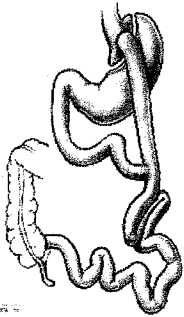
### Restriction: Lap Band



- 40% XS Wt Loss
- No metabolic effects
- Fewer technical complications
- ? Long term effects of Band



### Gastric Bypass



- 50-60 XS Wt loss
- Reduces Ghrelin
- Reasonable safety
- Moderate metabolic changes
- Long track record



### Access for RYGBP

- |                     |                        |
|---------------------|------------------------|
| • Open              | • Laparoscopic         |
| • 7-9 inch incision | • 6 1/2 inch incisions |
| • Plastic closure   | • surface inspection   |
| • Local anesthetic  | • 325 patients         |
| • hand exploration  |                        |
| • find pathology    |                        |
| • 1750 patients     |                        |

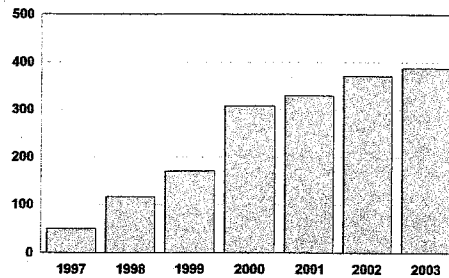


### Access for RYGBP

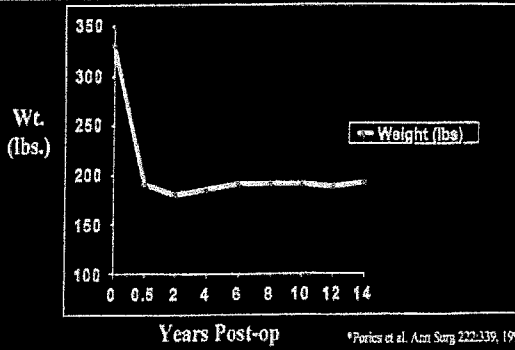
- |                               |                               |
|-------------------------------|-------------------------------|
| <b>Open</b>                   | <b>Laparoscopic</b>           |
| • pain score 3-5              | • pain score 2-4              |
| • leaks 0.9%                  | • leaks 1.2%                  |
| • stricture 1%                | • stricture 1%                |
| • transfusion 1.8%            | • transfusion 1.9%            |
| • hernias ~15%                | • hernias 1%                  |
| • return to work in 3-6 weeks | • return to work in 2-4 weeks |



### Gastric Bypasses at Pomerado



## Long-term Weight Loss in 608 Post-GBP pts\*



## GBP Outcome

### Relief of Comorbidities

Relief is related to amount of weight loss  
Greatest % of relief comes w first 30% of loss  
Permanent damage not reversed.

	% Resolved or Markedly Improved
Sleep Apnea	95%
Diabetes	90%
GERD	85%
Hypertension	50%
Depression	50%

## Gastric Bypass Consequences

- Decreased Vit B<sub>12</sub>, Iron, ? Ca uptake
- Lactose intolerance
- Temporary hair thinning (partial loss)
- Need for plastic surgery
- Dumping Syndrome
- Psychological Challenges

## Gastric Bypass Mortality Infection

- Staple line leaks (1%) or abs
  - Occurs 1-10 days post op
  - Chest, abd pain; fever; SOB
- Early diagnosis and treatment is key to recovery
- Treated with CT or open drainage

## Outcomes

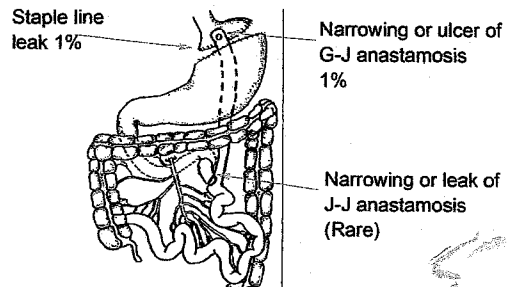
### Gastric Bypass Mortality

Death rate 0.3% (6/2000 patients)

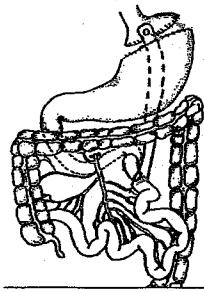
- Infection following staple line leak
- Pulmonary embolism
- ICU airway problem
- Cardiac arrhythmia

National average is 1% - 3%

## Roux Y Bypass Complications (I)



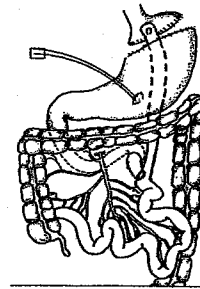
## Roux Y Bypass Complications (2)



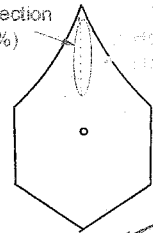
Bleeding  
Staple line  
Anastomosis  
(2% Txn)



## Roux Y Bypass Complications (3)



Infection  
(2%)



## GBP Follow Up Early Post Op Issues

- Adequate fluid intake
- Gastric acid blocking medication
- Nutritional support
  - Progressive diet: liquids to soft to solids
  - Protein intake (50gm/da)
  - Multivits, Fe, B<sub>12</sub>
- Actigall if gallbladder remains



## Support Groups

- Preop Education Support
- Pre/Postop Dietary Support
- Early Postop Support
- General Postop Support
- Electronic, YahooGroups.com



## Web resources

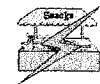
[www.ThinnerTimes.com](http://www.ThinnerTimes.com)  
[www.ThinnerTimesForum.com](http://www.ThinnerTimesForum.com)  
[asbs.org](http://asbs.org)  
 American Society for Bariatric Surgery  
[www.obesityhelp.com](http://www.obesityhelp.com)



## What Obesity Surgery Can Do What You Must Do

Feel full on smaller meal  
 Improve sense of self-control  
 Help many avoid sugary food  
 ? Drop weight set point

Avoid snacks  
 Choose healthy foods  
 Be active and exercise  
 Make psychological adjustments



## The Future at Pomerado for Obesity Surgery

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- Bariatric unit as part of 2nd floor IMC
- Continuing nursing education
- Aggressive contracting to increase cases
- Center of Excellence programs
  - Insurance company initiatives
  - ASBS - SRC



## Center of Excellence Program ASBS - SRC

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- Physician - Hospital Partnership
- Hospital facilities
- Nursing skills
- Physician skills
- Outcomes

