



Rajasthani & Gujarati Charitable Foundation

POONA HOSPITAL & RESEARCH CENTRE

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Volume 14

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Editorial

What is Obesity ?

Indications for Obesity Surgery

Multidisciplinary approach to Losing Weight

Types of Procedures

Effects of Bariatric Surgery

Post Operative Management

The New Lifestyle After Surgery

The Outcome of Bariatric Surgery in Type 2 Diabetes

Curing Obesity can reverse Infertility

विभिन्न विकारांना निमंत्रण देणारा लडूपणा



Rajasthani & Gujarati Charitable Foundation

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INTERNATIONAL CENTER *of* EXCELLENCE *for* BARIATRIC SURGERY

IN BANGALORE, U.S.A.

Poona Hospital & Research Centre

GARY M. FROST
CHIEF EXECUTIVE OFFICER
SURGICAL REVIEW CORPORATION

By SURGICAL REVIEW CORPORATION



RAVI J. ROODMAN, MD, FACS
CHAIRMAN
INTERNATIONAL PROGRAMS ADVISORY COMMITTEE



INTERNATIONAL CENTER *of* EXCELLENCE *for* BARIATRIC SURGERY

IN BANGALORE, U.S.A.

Dr. Jayashree Shankarrao Todkar

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EDITORIAL



More than 20 million Indians suffer from metabolic syndrome which is the route towards cardiovascular diseases. It is also declared as the 2nd largest threat to human life next to AIDS causing high number of premature deaths. It comprises of high B. P. diabetes, deranged cholesterol levels and central obesity. As per Asian Indian concensus BMI (body mass index) more than 28.5 and waist measurement more than 90 cm in males & 80 cm in females is obesity. Thanks to our genetic makeup, causing Indians to suffer from diabetes ; a strong association between obesity and diabetes. No system in the body is immune to the negative impact of obesity.

It leads to -

1. metabolic diseases as described above.
2. hormonal imbalance leading to sexual and fertility dysfunction hampering interpersonal relationships.
3. mechanical problems like joint pains, joint destruction, respiratory difficulty (snoring, breathlessness at trivial exertion), varicose veins, regurgitation / hyperacidity, urinary urgency etc.
4. psychosocial impact leading to depression, frustration and loneliness.

Hyperpigmentation in skinfolds/around neck, skin tags, excess hunger/thirst/ lethargy/sleep, irregular menstrual periods & hair growth at undesired places, growth of breast tissue in males are signature marks of obesity. It means one should visit an obesity clinic and get evaluated further. Diet and exercise are challenges in the adherence to these treatments. Effective and safe medicines do not exist till date. The successful and scientific treatments are bariatric surgeries which have a long term impact. These operations are performed on the stomach and intestine to modify the metabolic environment in the body which has a favourable impact on appetite, hunger, satiety and storage tendency of the body. Three types of operations are well suited for Indian population. Gastric Bypass, Sleeve Gastrectomy, Gastric Band. All operations are done laparoscopically (key hole surgery). Hospital stay is not more than 3 days & patients can resume work from the 3rd day of operation. We at Poona Hospital & Research Centre have an experience of more than four thousand surgeries over the last 10 years. Our Center is recognised as the INTERNATIONAL CENTER OF EXCELLENCE by the Surgical Review Corp. USA.

Thank you !

Regards,

Dr. Jayashree Todkar

Consultant, Dept. of Laparoscopy &
Bariatric Surgery - Poona Hospital.



What is Obesity ?

Dr. Jayashree Todkar*

Obesity is a chronic illness in which a person accumulates excess fat, which can jeopardise health.

The National Institute of Health (NIH) states that excessive weight becomes a health hazard when it is 20 percent or more above the ideal body weight

Anyone with a BMI of 30 or more is classified as obese. Obesity is the result of an increase in the size or number of fat cells in the body. When a person gains weight, these fat cells first grow in size and then in number.

It can result in either significant physical disability or even death.

Obesity can be defined by the following criteria:

Based on BMI

Class	BMI (Global)	BMI (Indian)
Normal	18.0-24.9	18-22.9
Overweight	25.0-29.9	23.0-27.9
Grade I obesity	30.0-34.9	28.0-32.9
Grade II obesity	35.0-39.9	33.0-37.9
Grade III or morbid obesity	40.0 and above	38.0 and above

Based on waist circumference

	Increased risk to life	Substantial risk to life
Men	≥ 94 cms	≥ 102 cms
Women	≥ 80 cms	≥ 88 cms

- **Obesity is more than a cosmetic issue**
- **Obesity is a disease and a serious health risk**

Many people have the misconception that being fat is simply a lack of self-control. Actually it is a complex syndrome that involves control of appetite and energy metabolism.

Similarly, being obese is often mistakenly considered the same as being overweight. In clinical terms, the difference is vital and often life threatening. Several medical organisations, including WHO, classify obesity as a disease and a serious threat to health.

Causes of Obesity :

Obesity can be caused due to various reasons like genetic factors changed lifestyles, energy dense diets, low level of physical activity, environmental factors, heredity, psychological and cultural influences and many others.

1. Genetic Factors :

Research shows that 80% of times genetic factors are responsible for a person's predisposition for developing obesity. They can directly lead to obesity in combination with several diseases. Unfortunately, we do not know how genes make us fat or thin. Some genes affect parts of the brain that control appetite and the feeling of being full. Others can determine how the body saves or burns calories.

2. Environmental Factors :

An increase in caloric intake, changes in lifestyle, food systems and increased portion sizes, eating out frequently also lead to increased calorie intake as one meal served in restaurants and fast food outlets exceeds a person's caloric needs for the entire day.

3. Psychological Factors :

Psychological factors play a significant role in the association of obesity and the responses to treatment. Further, concepts of dietary restraints, body image dissatisfaction and binge eating disorders have been intimately linked to obesity.

Psychological factors also affect eating habits. Many eat as a reaction to negative emotions, such as pain, depression or anger. Obesity leads to significant depression and is a major cause of depression in the obese. It is more accurate to consider obesity as a chronic illness rather than a lifestyle choice.

4. Physical Illnesses and endocrinological factors

Certain drugs may contribute to weight gain, such as corticosteroids, sulfonylureas for diabetes, steroidal contraceptives and anticonvulsants such as valproate used in anti epileptic therapy. Antipsychotics, antidepressants, mood stabilizers like lithium are medicines that have weight gain as a side effect.

Some illnesses can lead to obesity or weight gain. These include hypothyroidism and some neurological conditions that can cause a person to eat too much.



What is Morbid Obesity ?

Morbid Obesity is a chronic, lifelong illness. It is defined as a BMI ≥ 40 . When obesity crosses over to morbid obesity, the excess weight jeopardizes the person's life. Morbid obesity is associated with many debilitating and life-threatening illnesses that affect health and quality of life while shortening average life expectancy.

Since obesity is a chronic illness, its symptoms (called co-morbidities) develop gradually. If left untreated, obesity has a tendency to worsen.

These chronic ailments tend to worsen with increasing degree of obesity. Non-alcoholic fatty liver disease which may progress to end-stage liver disease is now also being recognized as a consequence of obesity. Obesity may also lead to

poor wound healing and poor antibody response indicating immunological suppression.

Studies have shown that once morbid obesity has gained a foothold, efforts such as diet and exercise programs have little chance to generate significant, lasting weight loss. The only way to treat current symptoms and prevent the onset of new symptoms is to achieve long lasting weight loss. The fact is that as soon as you put on weight again, the co-morbidity comes back.

Effects of Obesity and Morbid Obesity :

Health Risks :

Obesity is more than a cosmetic issue. It is a serious health risk. Obesity is linked to a number of chronic & debilitating illnesses (co-morbidities) such as type 2 diabetes, heart disease, high blood



pressure, certain types of cancer, sleep apnea and back and joint pains. As BMI increases, so does the risk of developing co-morbidities. When obesity becomes morbid, the medical problems can become life threatening.

Mortality :

Coronary heart disease is the major cause of weight-related death followed by diabetes mellitus, digestive diseases and cancer. Evidence suggests that through weight loss, women can reduce mortality rates from diabetes, cardiovascular diseases and cancer by 25%. However if an obese person has already developed an associated co-morbidity, then planned weight loss has been reported to reduce mortality by 20%.

The risk of premature mortality from a number of diseases increases as BMI increases. In addition, the risk of premature mortality increases, the longer a person has been overweight.

The increased rate of mortality is directly linked to weight gain. For people weighing 50% above the average weight, the risk of premature mortality is

twice as great as those who are not overweight.

Regional Distribution of fat & Health Risk

There are two types of Obesity

1. Android or apple-shape obesity
2. Gynoid or pear-shape obesity

This fat distribution is determined genetically & varies among men & women. Android obesity is more common among males whereas females are more susceptible to gynoid obesity. The android obesity is linked to chronic ailments such as glucose intolerance, insulin resistance, hyperlipidemia & hypertension. This type of obesity is also closely associated with the development of metabolic syndrome (a complex of unified conditions like glucose intolerance, high blood pressure and alterations in serum lipids).

Lower Quality of Life :

Social, psychological and financial effects of obesity are a reality and can be particularly devastating. Obesity is associated with lower quality of life. Obesity impairs physical, emotional and social functionality. Many overweight people often face judgment and discrimination. They become depressed and/or defensive and cannot live life to the fullest. Overweight people must adjust to daily problems, from finding clothes that fit and look good to finding a comfortable way to travel and live. In addition, daily activities become tiring and hard to perform. Overweight people also face social stigma when seeking work or education. They are routinely considered less qualified for a job or as someone with a poorer work ethic, emotional problems or problems with interpersonal relationships.

□ □ □

Indications for Obesity Surgery

Is Bariatric Surgery the right solution for my patient ?

- Presence of serious sequelae of morbid obesity
- 30 kg overweight or a BMI > 33 kg/m² for more than 5 years with at least one co-morbidity (ASIA PACIFIC GUIDELINES)
- BMI > 37 with or without co-morbidities
- Failure of sustained weight loss on supervised dietary and conservative approaches (OR Multiple unsuccessful attempts at weight loss with non-surgical methods)
- Absence of an endocrine cause (Secondary obesity).
- Acceptable operative risk
- Compulsive eaters
- Compliant patient, who demonstrates willingness to maintaining dietary guidelines and other follow-up care.
- Those who have support from family, spouse, or close friends.
- Surgery is not recommended for the mentally ill or impaired, patients known to abuse alcohol or drugs, or those with an eating disorder such as bulimia.

If the answer to the above is yes, then you should advise to seek the opinion of a Bariatric expert.

Only a surgeon specialised in bariatric surgery may determine whether someone is a suitable candidate. The general requirements for Indian population are:

- BMI \geq 37.5
- BMI \geq 32.5 coupled with several obesity-related health problems.
- Previous unsuccessful attempts to lose weight under medical supervision (i.e. – diet, exercise, medication)
- Underlying illness causing weight gain. (hormonal conditions)
- Will to make a life-long commitment to follow-ups and to follow the extensive dietary, exercise and medical guidelines.
- No medical or psychological obstacles to surgery or the use of anaesthesia.
- No alcohol or drug abuse.
- Quitting smoking at least 6 weeks prior to surgery.

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Multidisciplinary Approach to Losing Weight

Dr. Rahul Chhajed *

Obesity surgery is to be performed by surgeons specialised in obesity and laparoscopic surgery.

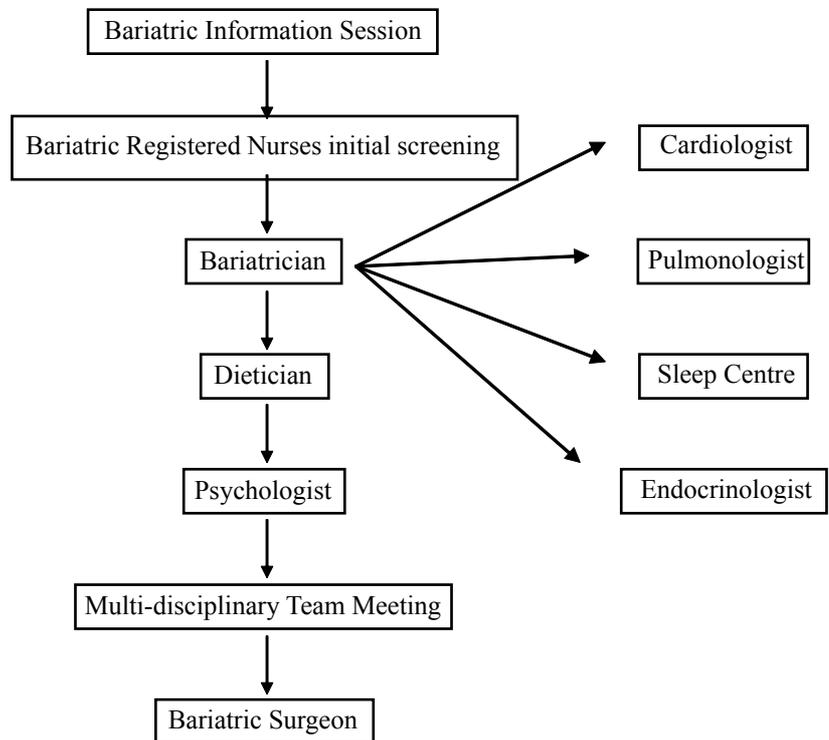
Because morbid obesity is a complex syndrome, it must be treated from several perspectives. Most obesity surgery units use a multidisciplinary approach. A team consisting of several types of professionals who are specialised in obesity and sensitive to the specific needs of morbidly obese patients are involved in activities such as:

- Evaluation of the patient prior to surgery,

assessing both the surgical alternatives and alternative treatments.

- Providing training and treatment after surgery.
- Dietary and psychological counseling
- Postoperative physical fitness program
- Long-term follow-up and support required to maintain weight loss- At our institute we are happy to involve the primary treating physician of patients throughout the treatment.

Screening Algorithm for Bariatric Patients



Role of Multidisciplinary team :

Doctors :

Internal medicine specialist, endocrinologist/diabetologist, primary care physician, gastro-enterologist and cardiologist

- Coordination of patient care
- Check and treatment of obesity-related medical problems
- Thorough physical and illness specific testing

Family Physician :

Evaluation of the patient's health condition
Timely diagnosis of obesity and related diseases
Guidance for the scientific way of treatment
Post-operative assessment of the changes in the medical condition and treatment accordingly

Dietician :

- Preoperative assessment of nutritional status
- Preoperative education on postoperative dietary and nutritional treatment (consistency, food product selection, portion size, meals, protein supplements, dietary supplements) as well as behavioural changes i.e. quality, quantity and technique of eating right. "Obey your gut" is the key to success and needs to be taught to the patients.

- Follow-up of dietary and nutritional treatment and behavioural changes during post-operative period.

Psychologist/ Counselor :

- Preoperative psychological evaluation with assessment of realistic expectations and insight into the life-long changes required in behaviour
- Early and continual postoperative follow-up
- Support and encouragement
- Assessment of emotional status
- Lifestyle changes
- Discussing reaction to the operation

Surgeon :

- Preoperative assessment of the patient's motivation and expectations
- Discussion of the benefits and risks of the different types of obesity surgery
- Choice of the operation best suited to the individual patient
- Postoperative follow-up of the procedure performed

Physical therapist :

Proper guidance about the physical activities of the patient for fitness purpose.

□ □ □

Dr Todkar's Bariatric Care team at Poona Hospital & Research Centre

- Dr. Jayashree Todkar - Bariatric Surgeon
- Dr. Ajit Tambolkar - Intensivist and Physician
- Dr. Bharat Jain - Physician
- Dr. Neeta Sawant - Physician
- Ms. Kaehalee Ghorpade - Clinical Psychologist and Counselor
- Ms. Arundhati Khadilkar - Psychologist and Counselor
- Ms. Mayuri Diwakar - Nutritionist
- Ms. Aishwarya Haldule - Nutritionist

Surgical Team -

- Dr. Sushil Kumar
- Dr. Rahul Chhajed
- Dr. Piyush Jain



Types Of Procedures

Dr. Shashank Shah *

Restrictive procedure :



In this procedure, a hollow band made of silastic material is placed around the stomach near its upper end, creating a small pouch and a narrow passage into the larger remainder of the stomach. The band is

inflated with a salt solution. It can be tightened or loosened over time to change the size of the passage by increasing or decreasing the amount of salt solution.

Restrictive weight loss surgery works by reducing the amount of food consumed at one time. The theory is simple; due to the restriction created, you feel satiated with small amounts of food and because of a smaller outlet, food stays in the stomach for a longer time. The net result is a reduction in daily caloric intake without a feeling of deprivation.

Advantages :

1. Because the band does not change the body's anatomy, there is a significant advantage.
2. It is a reversible operation.
3. Because the procedure is normally minimally invasive (keyhole operation), the patient recovers from surgery quickly and only a short hospital stay is required (normally 48 hours).
4. The volume of the band is adjustable, which means that the rate at which the stomach pouch empties can be increased or decreased to suit the situation and needs of the patient.

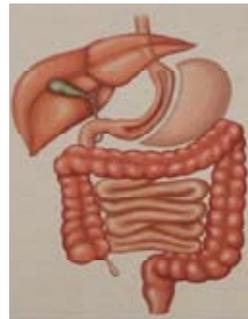
Disadvantages :

1. The operation could come to nothing if the patient continually eats or drinks things high in calories or fat.
2. Weight loss is less and slower than with other surgical procedures.
3. There could be postoperative complications from stomach expansion or movement.

Results :

1. With gastric banding patients lose an average of 50-60% of their excess weight during the first 12 to 18 months after surgery.
2. After this surgery, patients can maintain a large percentage of their weight loss over 10 years.
3. The majority of medical problems associated with obesity (type 2 diabetes, blood pressure, sleep apnea, depression and backaches) either improve or disappear after surgery.

Restrictive procedure : Sleeve Gastrectomy



Sleeve gastrectomy :

It is a laparoscopic procedure where a part of fundus and greater curvature of stomach is excised which is responsible for large production of the hunger hormone ghrelin.

Advantages :

1. There is reduction in the size of the stomach, but the normal method of nutrition is retained.

Continued on Page 13...

Hospital Update

CONGRATULATIONS -

- **Dr. Uday Miraje** for passing DNB Cardiology.
 - **Dr. A. Arul Daniel** for passing DNB Orthopedics.
 - **Dr. Dhairyashil Saste** for passing DNB Neurology.
 - **Dr. Ganesh Ghongate**
 - **Dr. Puja Deshpande**
 - **Dr. Dipali Desale**
- } for passing DNB Anesthesia.

We would also like to congratulate all the faculty members of above specialities for their efforts.

- **Dr. Ashwin Porwal**, Consultant Proctosurgeon, & **Dr. Paresh Gandhi**, General Surgeon, performed a 'Pelvic Organ Prolapse Surgery' successfully at Poona Hospital & Research Centre. It was a first of its kind in India.

CAMPS –

• *Blood Donation Camps -*

A total of 14 Blood Donation Camps were arranged during the months of March 2013 - June 2013 at various places like Shirur, Pashan, Pimpri, New Sangvi, Khadaki etc. The response at these camps was very encouraging. A total of 1044 people donated blood during these camps.

- **A free Health Checkup Camp** for the members of 'Pune Shramik Patrakar Sangh' was arranged from 11th March to 16th March 2013. Several types of investigations done free of cost during this camp. More than 150 members participated & took benefits of this camp.
- **A free Audiometry Screening Camp** was organised on 19th April 2013 & 21st April 2013. Pure Tone Audiometry Test & counseling were done free of cost for participants.
- **A free Health Checkup Camp** for patients with ear, nose & throat diseases was arranged during 27th May & 08th June 2013. Free ENT Consultation, 50% concession for Audiometry Test & 50% discount for the general wards patients who needs to undergo ENT Surgeries was availed during this camp.

CME'S & TRAINING PROGRAMMES -

- **Dr. Jayashree Todkar**, arranged a meet for mega support group for obesity patients on 01th May 2013 & 25th June 2013.
- **Indian Society of Anesthesiologist**, organised a CME on '**What have we learned from adverse events**' on 02nd May 2013.
- **A Fellowship Course of IAGES**, was organized comprising of lectures, live workshops & examinations from 23rd May 2013 to 26th May 2013.
- **Dr. Nitin Abhyankar** on behalf of '**Prevent Addictions through Children's Education**' & '**CIPLA**', arranged an awareness program on 30th May, 2013.
- A Public Lecture was organised on '**Healthy Living**' on 09th June 2013, under the guidance of **Dr. J. S. Hiremath**.
- **Department of Medicine**, Poona Hospital & Research Centre organized the following CME's on
 1. '**Hepatitis-C**' & '**NASH-Non Alcoholic Steatohepatitis**' on 12th March 2013.
 2. '**Biomedical Waste Management**' & '**HOSPICE**' on 09th April 2013.
 3. '**Hypercalcemia**' & '**Hypocalcemia**' on 14th May 2013.
 4. '**Hyponatremia**' & '**Hypernatremia**' on 11th June 2013.
 5. '**Hyperkalemia**' & '**Hypokalemia**' on 09th July 2013.



DEPARTMENT	MONDAY	TUESDAY	WEDNESDAY
MORNING 10 A.M. TO 12.30 P.M.			
MEDICINE	DR. N. M. BEKE	Dr. V. GUNDECHA	DR. A. BAHULIKAR
SURGERY	DR. R. S. DUMBRE	DR. D. JAIN	DR. S. SHAH
GYNAE & OBSTETRICS	DR. (MS) S ANPAT	DR. (MS) S. KAKATKAR	DR. A. SHAH
PAEDIATRICS	DR. P. V. ALATE	----	DR. L. RAWAL
ORTHOPAEDICS	DR. R. KOTHARI	DR. A. DESAI	DR. R. ARORA
E.N.T. (10.30a.m.-1.30p.m.)	DR. A. M. ATHANIKAR	DR. (MS) V. SHIRVEKAR	DR. (MS) V. JOSHI
OPHTHALMOLOGY	DR. (MS) V. RAWAL	DR. P. GORANE	DR. M. B. JHAMWAR
PSYCHIATRY	DR. V. G. WATVE	DR. D. M. DHAWALE	DR. S. CHAUGULE
DERMATOLOGY	DR. H. S. CHOPADE	DR. S. TOLAT	DR. H. S. CHOPADE
CHEST DISEASES	DR. N. ABHYANKAR	----	DR. N. ABHYANKAR
ONCOLOGY	DR. S. M. KARANDIKAR	DR. S. M. KARANDIKAR	----
ONCOSURGERY	----	----	DR. S. MOHITE
11.30 A.M. TO 12.30 P.M.			
CARDIOLOGY	DR. J. HIREMATH	DR. S. SATHE	DR. S. HARDAS
CARDIAC SURGERY	DR. V. NATRAJAN DR. V. KARMARKAR (10.00a.m.to 12.30p.m.)	DR. M. BAFANA DR. V. NATRAJAN	DR. SHIV GUPTA * DR. V. NATRAJAN
NEUROLOGY	DR. N. BHANDARI	DR. S. KOTHARI	DR. (MS) A. BINIWALE
NEURO-SURGERY	DR. P. BAFNA	DR. S. PATKAR	DR. N. LONDHE
NEPHROLOGY	DR. N. C. AMBEKAR	DR. S. V. UKIDVE (10-12 p.m.)	DR. N. C. AMBEKAR
URO-SURGERY	DR. S. BHAVE	----	DR. J. DATE
PLASTIC SURGERY	DR. R. GANDHI	DR. S. PANDIT	DR. R. GANDHI
GASTROENTEROLOGY (MED.)	DR. V. THORAT	----	DR. V. THORAT
GASTROENTEROLOGY (SURG)	----	DR. R. TANDULWADKAR	----
ENDOCRINOLOGY	DR. M. MAGDUM	----	----
HAND SURGERY	DR. A. WAHEGAONKAR	DR. A. GHOSH	----
AFTERNOON 1 P.M. TO 3.30 P.M.			
MEDICINE	DR. C. G. SHETTY	DR. (MS) A. SHAHADE	DR. (MS) G. DAMLE
SURGERY	DR. P. PRADHAN	DR. B. DIKSHIT	----
GYNAE & OBSTETRICS	----	DR. (MS) M. CHIPLONKAR	----
VASCULAR SURGERY	----	----	DR. D. R. KAMERKAR
OPHTHALMOLOGY	----	----	----
CARDIOLOGY----	----	----	----
NEUROLOGY	DR. D. SASTE (2 to 4 p.m.)	----	DR. N. BHANDARI
SPECIALITY CLINICS			
HERNIA CLINIC 12.30 p.m. - 1.30 p.m.	----	----	----
DIABETOLOGY 8.30 a.m - 9.30 a.m.	DR. (MS.) G. DAMLE	DR. B. B. HARSHE	----
HEMATOLOGY 9.00 a.m.-11.00 a.m.	----	----	----
PROCTOLOGY 12.00 p.m. to 2.00 p.m.	----	----	----

	THURSDAY	FRIDAY	SATURDAY	SUNDAY
	DR. V. G. SHAH	DR. M. TULPULE	DR. K. P. RUNWAL	DR. A. TAMBOLKAR
	DR. A. FERNANDES	DR. B. DIKSHIT	DR. A. PORWAL	DR. A. FERNANDES
	DR (MS) N. DESAI	DR. A. SHAH	DR. (MS) N. DESAI	----
	DR. P. V. ALATE	----	DR. L. RAWAL	----
	DR. R. KOTHARI	DR. A. DESAI	DR. N. NAHAR	----
	DR. A. M. ATHANIKAR	DR. S. PABALKAR	DR. (MS) V. JOSHI	----
	DR. R. BHANGE	DR. (MS) V. RAWAL	DR. P. ASAWA	----
	DR. V. G. WATVE	DR. D. M. DHAWALE	DR. S. CHAUGULE	DR. M. DIXIT / DR. H. KULKARNI
	DR. H. S. CHOPADE	DR. H. S. CHOPADE	DR. H. S. CHOPADE	----
	----	DR. N. ABHYANKAR	DR. (MS) V. KHADKE	DR. J. JAIN
	----	DR. S. M. KARANDIKAR	----	----
	DR. S. MOHITE	----	DR. S. MOHITE	----
	DR. M. ASAWA / DR. H. GUJAR	DR. P. SHAH	DR. C. CHAVAN / DR. R. BADANI	----
	DR. R. JAGTAP *	DR. V. NATARAJAN DR. V. NATRAJAN	DR. R. JAGTAP *	* By Appointment Only
	DR. P. K. SHARMA	DR. S. KOTHARI	DR. P. K. SHARMA	----
	DR. S. PATKAR	DR. P. BAFNA	DR. S. PATKAR	----
	DR. S. V. UKIDVE (10 - 12 p.m.)	DR. N. C. AMBEKAR	DR. S. V. UKIDVE (10-12 p.m.)	
	DR. S. BHAVE	DR. J. DATE	----	----
	DR. S. PANDIT	DR. S. PANDIT	DR. R. GANDHI	----
	----	DR. S. JAIN	DR. N. DUBALE	----
	DR. R. TANDULWADKAR	DR. M. THOMBARE	----	----
	----	DR. M. MAGDUM	----	----
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	----	----	----	----
	----	----	DR. (MS) V. RAWAL	----
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	DR. V. RAMANAN	----	----	----
	----	----	DR. ASHWIN PORWAL	----



Rajasthani & Gujarati Charitable Foundation's
POONA HOSPITAL & RESEARCH CENTRE

27, Sadashiv Peth, Pune 411 030.
Tel. : 24331706, 66096000, Fax : 24338477

DEPARTMENT OF DENTAL SURGERY

Timings	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09.30 to 11.30 a.m.	Dr. Paresh Gandhi	Dr. Anjali Gandhi	Dr. Shashikant Bamb	Dr. Charudatta Naik	---	Dr. Surendra Rathi
12.30 to 02.30 p.m.	Dr. Mukund Kothawade	Dr. Paresh Gandhi	---	Dr. Paresh Gandhi	Dr. Mukund Kothawade	Dr. Charudatta Naik
03.30 to 5.30 p.m.	Dr. Shashikant Bamb	Dr. Surendra Rathi	---	Dr. Shashikant Bamb	Dr. Surendra Rathi	Dr. Anjali Gandhi

CASHLESS FACILITIES

TPAs : The following TPAs (**Third Party Administrators**) have a tie up with Poona Hospital for their members to avail of the treatment facilities provided by the hospital.

- * Medi Assist India Pvt. Ltd.
- * Medicare TPA Services (I) Ltd.
- * MD India Health Care Services Pvt. Ltd.
- * Paramount Healthcare Services Ltd.
- * Health India (Bhaichand Amoluk Ins.)
- * Genins India Ltd.
- * Park Mediclaim.
- * Raksha TPA Services.
- * Dedicated Health Care Services.

INSURANCE COMPANIES : Poona Hospital also provides cashless facilities to policy holders of the following Insurance Companies

- * ICICI Prudential,
- * Bajaj Allianz Gen. Insurance Co. Ltd.
- * Future Generali Total Insurance Solutions
- * Star Health & Allied Insurance Co. Ltd.
- * IFFco Tokio General Insurance
- * ICICI Lombard General Insurance (I Health Care),
- * MAX BUPA Health Insurance
- * Cholamandalam MS Gen. Ins.
- * Religare Insurance Co. Ltd.
- * Apollo DKV.
- * Reliance General Insurance

Continued from Page 8...

2. Ghrelin area is removed, therefore less feeling of hunger, less cravings.
3. No dumping syndrome, since the muscle at stomach outlet remains intact.
4. Intestine remains completely intact.
5. Gastroscopy still possible without any difficulties

Disadvantages :

1. The effect of the stomach reduction does not work with high-caloric liquid nutrients or fluids.
2. Non-reversible operation – part of the stomach is removed.
3. Complications such as leakage or fistula are possible, though rare.

Results :

1. Patients have achieved loss of excess weight upto 50-80% two or three years after surgery.
2. The majority of medical problems associated with obesity (type-2 diabetes, high blood pressure and sleep apnea) either improve or disappear after surgery.

Restrictive & malabsorptive procedure :



Gastric bypass (Gastric Roux-X-En-Y Bypass)

In this procedure, stapling creates a small (15 to 20cc) stomach pouch. The remainder of the stomach is completely stapled shut and divided from the stomach pouch. It is not completely removed. The outlet

from this newly formed pouch empties directly into the lower portion of the jejunum, called the Roux limb, thus eliminating the duodenum and a small portion of the jejunum from the absorptive circuit. The omitted segment is connected into the

side of the Roux limb of the intestine creating the "Y" shape that gives the technique its name.

Advantages :

1. Greater total weight loss compared to restrictive procedures.

Disadvantages :

1. Since there is malabsorption of nutrients, mineral & vitamin deficiency is a possibility.

The duodenum being bypassed, poor absorption of iron and calcium can result in the lowering of total body iron and a predisposition to iron deficiency anemia.

- A chronic anemia due to Vitamin B12 deficiency may occur. The problem can usually be managed with Vitamin B12 pills or injections.
- A condition known as "dumping syndrome" can occur as the result of rapid emptying of stomach contents into the small intestine. This is sometimes triggered when too much sugar or large amounts of food are consumed. Generally not considered to be a serious risk to the health, a few modifications in the dietary pattern can alleviate this problem totally.
- Vitamin D deficiency
- All the above listed deficiencies can be easily managed through a proper diet and vitamin and calcium supplements.

Results :

1. By one year after surgery, patients have lost approximately 77% of their excess weight.
2. Scientific research shows that patients retain their weight loss 10 to 14 years after surgery.
3. The majority of medical problems associated with obesity like type 2 diabetes, high blood pressure, sleep apnea, depression & backaches either improve or disappear after surgery.
4. In most cases, patients report a clear feeling of fullness combined with a feeling of satisfaction that reduces the desire to eat.

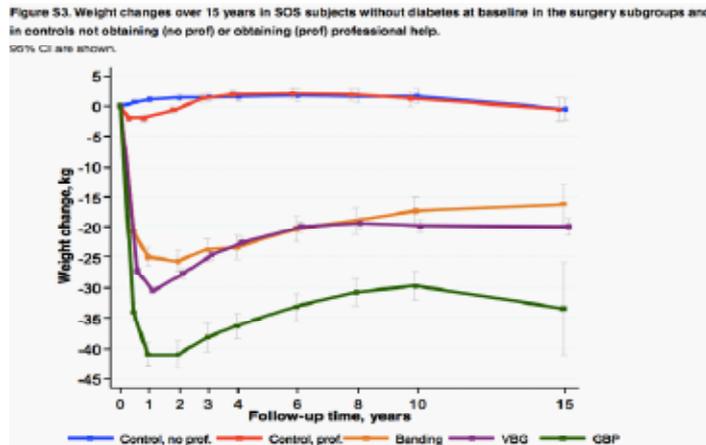




Effects of Bariatric Surgery

Dr. Jayashree Todkar *

For the morbidly obese, obesity surgery is the only documented method that leads to lasting weight loss when all other forms of treatment have failed.



Studies have shown that obesity surgery is the only way for morbidly obese patients to achieve long lasting weight loss and prevent the onset of new, obesity-related illnesses. A study of more than 22,000 patients showed that they lost an average of approximately 61.2% of their excess weight after obesity surgery. Non-surgical treatment on the other hand, only works for 1 out of 120 who are morbidly obese. Less than 5% of those who participated in non-surgical weight loss programs had any significant weight loss and maintained it long term.

Obesity surgery on the morbidly obese is associated with lasting weight loss and reduced risk of death.

Even though obesity surgery is often considered risky, for many patients, the risk of remaining morbidly obese is much greater than the risk of surgery.

Obesity surgery significantly reduces the likelihood of death and prevents the development of new obesity-related health problems in morbidly obese patients. Scientific research shows that obesity surgery reduces the risk of death by 30%.

Obesity surgery is a safe treatment :

The number of obesity operations has increased significantly in the past few decades. At present, the likelihood of complications from obesity surgery is comparable to that from one of the most common surgical procedures – laparoscopic cholecystectomy.

The surgery is performed laparoscopically and a patient's hospital stay is approximately 2-3 days.

Obesity surgery leads to the reduction or disappearance of obesity related medical problems.

**** For diagram see inside back cover**



Post Operative Management

Dr. Piyush Jain *

Follow up of the obese patient who has had bariatric surgery can be divided into two areas :

- Issues of surgical care and weight loss.
- Nutritional and metabolic monitoring.

Year 1

Diabetes type 2 : Early in the post operative one can see a normalization of blood glucose-even before the weight loss but one has to carefully follow up the diabetes. Large well-controlled studies report more or less a complete resolution (=80% and further 10% have improvement of the diabetes)

Insulin : Decrease in basal insulin requirement may be needed before discharge. When the patient starts caloric intake, a small dose of insulin along with meal is initiated as needed. Basal-bolus insulin regimens after bariatric surgery create a challenge because patients' eating can be unpredictable because of changes in satiety. Patients are better served by a rapid acting insulin analogue for prandial coverage if needed.

Oral antidiabetic agents (OAD)

Patients with diabetes treated with oral agents often cease to need all oral hypoglycemic agents as early as the immediate post operative period.

Vomiting and dumping syndrome : Vomiting is usually due to overeating or not chewing food adequately.

With proper pre and post operative education this is not a problem at all.

Dumping syndrome is sometimes seen after gastric bypass. High sugar containing food entering small intestine causes osmotic over load. This osmotic overload brings fluid into the lumen of the small intestine, resulting in a vagal stimulation. Patients

may complain of lightheadedness and sweating after eating a high glucose meal or drinking fluid with a meal. Patients feel fatigued and it can be followed by diarrhea. It is recommended to separate fluids from meals.

Dehydration can be a result of not drinking enough water. It is recommended them to sip fluid throughout the day.

Hair loss : Hair loss is seen frequently 3-6 months after surgery. But it reverses in majority of cases.

Gallstone formation : Cholelithiasis is quite common and patients presenting with abdominal pain in right upper quadrant should be treated according to local guidelines (ultrasound etc). A surgical opinion may be sought.

After year 1

B 12 deficiency

This is seen primarily with gastric bypass and any of the malabsorption procedures and because food now bypasses the lower stomach. Oral and sublingual forms of vitamin B12 are to be prescribed. In special cases patients require monthly intramuscular B12 injections.

Iron deficiency : Iron deficiency is usually only seen in menstruating women. Monitor iron levels and erythrocyte counts – and offer injectable iron.

Ulcers : Ulcers at the margin of the anastomoses between the stomach pouch and the small intestine are a common cause of blood loss. All NSAIDs (non-steroidal anti-inflammatory drugs) including aspirin, & COX-2 (cyclooxy-genase-2 inhibitors, have the potential to cause ulcers; use of these drugs is to be avoided at all costs in gastric bypass patients.

□ □ □



The New Lifestyle After Surgery

Dr. Sushil Dubey *

Diet :

Although the postoperative dietary guidelines differ between different surgeries and types of procedures, a patient must eat differently, have a healthier lifestyle and commit to following documented guidelines for long-term success. While it may be a challenge at first, it will help one gain maximum benefit from the operation. What is most important is to follow the strict guidelines provided by the dietician, surgeon or nurse.

After the procedure, a patient will most likely start with a liquid diet, followed by food with a mashed/puree consistency. He will then slowly resume eating a more normal diet with healthy, lean food that is low in calories. Following the dietary guidelines does not mean that he can no longer enjoy life.

He will still be able to go out and eat with family and friends. He will just need to learn new eating habits that will help prevent him from eating too much and experiencing uncomfortable side effects. He must take his time and focus on the conversation. Consider the occasion an opportunity to relax instead of focusing on the food.

Exercise :

After the surgery, it is not enough to simply change one's eating habits. One must also change level of physical activity. In general, patients should start exercising at a slow pace. Consult the surgeon before increasing physical activity. He or she will provide an individual exercise program tailored

to individual needs. The physical activities will become easier as one loses weight.

Contraceptives and Pregnancy

Adjustable Gastric Banding :

Pregnancy entails no increased risk compared to non-obese women. It is not advisable to get pregnant immediately after an adjustable gastric banding procedure since the fetus needs a good supply of nutrients. Should the patient become pregnant, all fluid should be removed from the band. Follow-ups and checks are a necessity.

Gastric bypass and sleeve gastrectomy :

Because gastric bypass and sleeve gastrectomy change the absorption of several nutrients and induce rapid weight loss, pregnancy should be avoided for at least 12-18 months after the procedure. The use of birth control pills should be coupled with other contraceptive methods.

Two studies of 111 pregnancies after gastric bypass showed minimal side effects through thorough medical checks and suitable vitamin and nutrient supplements.

A folic acid supplement should also be discussed.

Support Groups :

Support groups can be an excellent forum for patients who have undergone obesity surgery to discuss various personal and professional issues. The surgeon can provide information on support groups that can help with short and long-term questions and needs.

Regular check-ups and long term follow-up :

It is vital to get checked regularly after surgery. This is done on an out-patient basis. The surgeon and his team will discuss this with the patient and he will be given an individual check-up schedule. The check-ups will be relatively frequent at first, but will decrease in frequency over time. Once the weight has stabilized, one will normally only come in for an exam once a year.

Adjustable Gastric Banding :

During the first 18 months after surgery, the band may be gradually filled with fluid. More frequent

check-ups maybe required during this period. Once the weight has stabilized, one will normally only come in for an exam once a year.

Gastric bypass & laparoscopic sleeve gastrectomy

The first check-up will be after a few weeks. Over time, the intervals between check-ups will be longer. Once the weight has stabilized, a patient will normally come in for exam only once a year.

All the follow ups can be done through e-mail or electronic communication.

□ □ □

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- A young mother paying a visit to a doctor made no attempt to restrain her five-year-old son, who was ransacking an adjoining room.

Finally, a rather loud chatter of bottles prompted her to say, 'I hope you don't mind my son being in there.'

'Not at all,' said the doctor calmly, 'he'll become quiet when he gets to the poison.'

★ ★ ★

- A doctor answers his phone and hears a colleague voice at the other end of the line saying, 'We need fourth for a game of bridge.'

'I'll be right over,' whispers the doctor.

As he is putting on his coat, his wife asks, 'Is it serious', 'Oh yes, quite serious,' says the doctor gravely, 'In fact there are three doctors there already !'

★ ★ ★

- Vivek : It's been one month since my last visit to you and I still feel miserable.
Dr. Mallik : Did you follow the instructions on the bottle of medicine I gave you ?
Vivek : I sure did. The bottle said 'Keep tightly Closed.'

★ ★ ★

'PSYCHO - THE - RAPIST !'

A psychotherapist, who had started from scratch, was having such success in his business that he could now afford to have a proper banner advertising his practice. He told a young boy to paint the signboard for him and put it above the entrance to his chamber.

He soon noticed, however, that instead of his business building up, it was beginning to slacken. It was when his assistant observed that the ladies in particular were shying away from his office after reading the signboard that he decided to check it out himself.

There at the entrance was a small wooden board that read, 'PSYCHO-THE-RAPIST !'



The Outcome of Bariatric Surgery in Type 2 Diabetes

Dr. Jayashree Todkar *

Efficacy : The benefits of surgery are compelling, and its recipients are among the most grateful patients you will encounter. Weight-reducing surgery does more than reduce weight. It offers psychological benefits and reduces blood pressure, lipids and blood glucose, and the need for these to be treated. Deaths from cardiovascular disease and cancer are reduced, and many of the secondary consequences of obesity, such as fatty liver, musculoskeletal disorders, intracranial hypertension, sleep apnea and infertility are ameliorated. Not surprisingly, long-term health costs are also likely to fall, including those associated with diabetes.

A study of more than 22,000 patients showed that obesity surgery leads to the disappearance or improvement of medical problems such as type 2 diabetes, high cholesterol, high blood pressure and obstructive sleep apnea.

Safety : Bariatric surgery is safe in the hands of experienced surgeons. One meta-analysis revealed a 30-day mortality of 0.1% after gastric banding, 0.5% after gastric bypass and 1.1% after biliopancreatic diversion. The short term operative mortality for low risk patients attending centres with experienced surgical teams is around 1/2,000. Short term complications after surgery are venous thrombo-embolism and cardiovascular events. Venous thromboembolism affected 0.3% of banding patients and 0.4% of laparoscopic gastric bypass patients in a large survey from US.

Health care cost savings : The evidence for cost

effectiveness of surgically induced weight loss is compelling. During the last five years papers have been published from all over the world where the conclusions are that bariatric surgery saves money spent on health care. Keating et al conducted a within –trial where they compared the cost-effectiveness of surgical therapy with conventional therapy in obese patients with Type II Diabetes. They found strictly from a cost perspective (Disregarding quality of life and life expectancy benefits of Diabetes remission) that after 10 yrs the return of investment of surgical therapy is fully recovered through savings in health care costs to treat Type II Diabetes.

Improvement in Quality of life : Weight reduction in the severely obese is accompanied by improvements in health-related quality of life (HRQL) and some studies indicate that a dose-response relationship exist between the magnitude of weight loss and HRQL benefits. In the Swedish obese subjects (SOS) intervention study they followed 655 surgically treated patients for 10 years and compared them with a group of conventionally treated obese patients. They concluded that the change in HRQL followed the phases of weight loss, weight gain and weight stability. But they also found that a maintained weight loss of 10% is sufficient for positive long term effects on HRQL. The surgically treated patients who completed 10 years of the study easily achieve this.

□ □ □



Curing Obesity can reverse Infertility

Dr. Jayashree Todkar *

The hormonal scenario in the body is the primary reason for ovarian dysfunction. Hormones generated by the ovaries are complex and there are multiple stimulating and inhibiting factors. Earlier it was believed that fat cells are the cold storage of energy, but today researchers have realized that it is not true. It has been found that fat cells are not only the cold storage of energy but are active sources of hormones as well. These cells secrete hormones including sex hormone and a number of enzymes.

Excess fat cells lead to hormonal imbalance in the body which then gives rise to a number of complications. Women experience disturbances in their menstruation commonly associated with polycystic ovarian syndrome which is a part of metabolic syndrome. Those suffering have excess growth of unwanted hair and ovaries fail to generate normal ova essential for fertility.

Similarly in men, abnormal fat mass leads to excess secretion of feminine hormones which hampers testicular function. They experience excess growth of the chest, like in women. Some patients also suffer from low testosterone levels which along with obesity and insulin resistance, contribute to erectile dysfunction. Women also experience disturbances in their sexual function.

Bariatric Surgery :

Once obesity is treated many of these factors are reversible. After bariatric surgery, a lot of patients who had lost hope of bearing kids conceive naturally, once the normal hormonal environment is re-established in the body.

If one is overweight or obese or has a BMI of more than 32.5 or one's waist circumference is more than 80 cm (female) and 90 cm (male), one needs to visit a bariatric clinic.

Obesity treatment is not only about health gain and better quality of life but also relief from Diabetes type2, high BP, elevated cholesterol levels; weight related joint problems and sexual dysfunction, including infertility.

After bariatric (anti-obesity) and metabolic surgery is done, all the above conditions start improving through hormonal modifications. Studies conducted across the world have shown that both genders experience substantial change in sexual performance and desire. The ovarian and testicular function is improved significantly.

No Scars :

The surgery is performed laparoscopically; it does not leave any scar. The procedure is done through the navel dip (umbilicus) so one can wear a bikini without bothering about scars.

For the surgery, you need to stay in the hospital for about two days and can resume your usual activities in another two days (approx). Post surgery, the patient starts experiencing excessive weight loss and is advised to practice contraception for the first 10 to 12 months or else they may get pregnant and it is not desired till the maximum metabolic effect of the surgery is achieved. This period may vary as per the case, but it's roughly one year. And even if the patient's previous history is bad, most respond in a positive manner.





विभिन्न विकारांना निमंत्रण देणारा लठ्ठपणा

डॉ. जयश्री तोडकर *

जागतिक आरोग्य संघटना (डब्ल्यूएचओ) यांनी केलेल्या सर्वेक्षणानुसार पुढील पाच वर्षात भारत हा देश सर्वात जास्त मधुमेहींचा देश म्हणून ओळखला जाईल. मधुमेह आणि लठ्ठपणा या दोन गोष्टी हातात हात घालून चालणाऱ्या असल्याने त्यांचे आपल्या देशातील वाढते प्रमाण खरोखरी चिंताजनक आहे. पारंपारिक भारतीय जीवनपद्धती न अंगिकारल्यामुळे आपल्याला आरोग्याच्या बऱ्याच समस्यांना तोंड द्यावे लागत आहे.

व्यक्तीचे व्यक्तिमत्व त्याच्या आंतरिक सौंदर्यावरही अवलंबून असते. आंतरिक सौंदर्य म्हणजे चांगले स्वास्थ्य सध्याच्या धावपळीच्या युगात झपाट्याने बदलत चाललेल्या जीवनशैलीमुळे हे चांगले स्वास्थ्य टिकविणे अतिशय कठीण झाले आहे. चांगल्या स्वास्थ्यात बिघाड झाल्यामुळे त्याचा जसा परिणाम शरिरावर होतो, त्याचप्रमाणे मनावर देखील होतो. यामुळे शारीरिक स्वास्थ्या बरोबरच मानसिक स्वास्थ्य देखील बिघडते.

चांगले स्वास्थ्य बिघडण्याची कारणे म्हणजे जंक फूड, व्यायामाचा अभाव, पळापळीची जीवन पद्धती, ताणतणाव व स्पर्धेत टिकून राहण्यासाठी चाललेली धडपड, अनुवंशिकता व अंतर्ग्रंथींचे आजार. मुख्य दुष्परिणाम म्हणजे लठ्ठपणा किंवा वाढते मेदाचे प्रमाण, रक्तदाब, काही प्रकारचे कर्करोग यामुळे मधुमेह, किडनी व लिव्हर यांचे आजार, हृदयरोग,

सांध्यांचे आजार, पचनाचे आजार. रक्तवाहिन्या व नसांचे आजार, नपुंसकता इत्यादींमागे बऱ्याच अंशी लठ्ठपणा कारणीभूत असतो. त्याचप्रमाणे झोपेतील श्वसनाचे अडथळे, नैराश्य, वंध्यत्व, मूत्रविसर्जन नियंत्रण अक्षमता, मासिक पाळीतील अनियमितता, पायांच्या अशुद्ध रक्तवाहिन्यांचे आजार इत्यादी.

अति वजन असणे व लठ्ठ असणे यात फरक आहे. अति वजन म्हणजे सर्वसाधारण मानकांपेक्षा जास्त वजन. हे स्नायू, हाड, मेद आणि शरीरातील पाण्याचे बनलेले असते. लठ्ठपणा हा शरीरातील अनैसर्गिक अतिरिक्त मेदामुळे होतो. वजनातील पाच ते दहा टक्के किरकोळ घट देखील इतर संबंधित त्रासापासून मुक्त करू शकते असे संशोधनावरून सिद्ध झाले आहे.

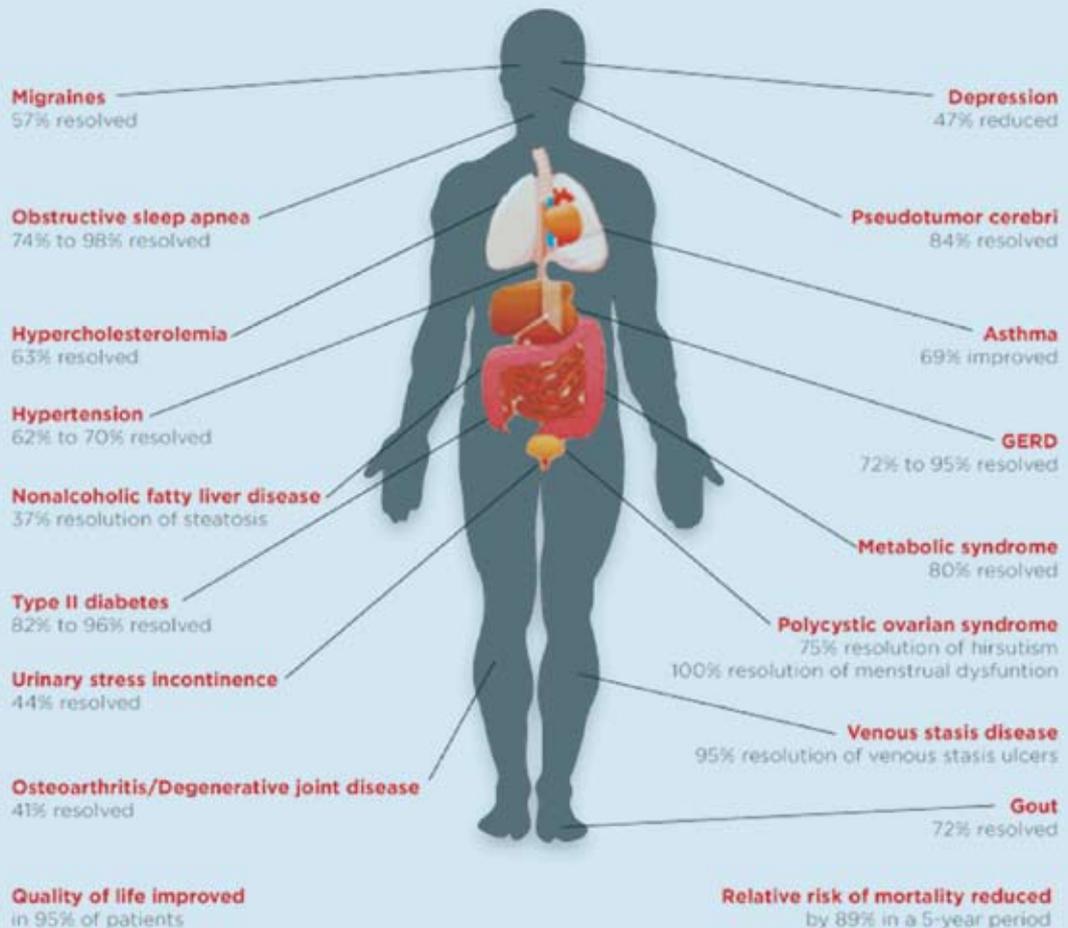
लठ्ठपणा टाळण्यासाठी किंवा वाढू नये यासाठी खाण्यावर नियंत्रण, योग्य व नियमित शारीरिक व्यायाम, सतत कार्यमग्न असणे, अंतर्ग्रंथींच्या कामातील बिघाड शोधून त्यावर उपचार करून घेणे हे मार्ग आहेत.

हे जरी उपचार असले तरी हे उपाय तात्पुरते, स्वतःची उपासमार करायला लावणारे, खूप व्यायाम करायला लावणारे आणि जोपर्यंत हे चालू आहे तोपर्यंत टिकणारे उपाय आहेत.

लठ्ठपणा व त्याच्याशी निगडित आजार कायम चे घालविण्याचे उपाय आहेत. त्याविषयी माहिती देण्यासाठी हा उहापोह.

□ □ □

EFFECTS OF BARIATRIC SURGERY



** See Article on Page 14



Rajasthani & Gujarati Charitable Foundation

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