

# DCF Newsletter

Vol. 16 No. 173 • MARCH 2013 • PRICE ₹1.50 PER COPY



Dear Friends,

Patients are losing faith in medical profession due to unnecessary and uncalled for procedures / hospitalization; inadequate / wrong treatment, overbilling, poor communication and lack of coordination between the treating team and family. Therefore, it is our collective responsibility to restore their faith in the medical profession.

Medical treatment facilities are expanding very fast and patients prefer to get treated close to their residence. But Cancer patients have unique needs which may / may not be fulfilled next door. They must be referred to a right institution, even if, they have to travel long distances. There are multiple choices available in metro cities and patients are in a dilemma about choosing a cancer hospital.

Cancer treatment is highly advanced, organ specific, targeted, lengthy, expensive and emotionally draining. Therefore, patients must know their right options. Patients need institutions which are totally patient centric, have latest technologies (diagnostic and therapeutic) highly skilled, trained, dedicated and compassionate team of oncologists, capable of providing adequate and organ specific treatment, as per National / international guidelines; trained nursing and support staff; excellent systems and standards; transparent billing and above all, capable of achieving, desired treatment outcome.

We at Dharamshila Hospital have created a culture of being patient oriented, customer friendly, innovative, financial viability and conviction. We bypass people who say it cannot be done, offer solutions not explanation to problems, think from patient and patient's family perspective, focus on our core strengths of serving specific segment of society. We practise discipline, flexibility and accountability to make patients feel good to great.

Do visit our centre at your convenience to see for yourself the quality of care, we provide to our patients.

I shall be grateful to you, if you mail your email ID for communicating with you.

Looking forward for your valuable support.

Thanking You!

**Dr. S. Khanna**  
Executive Director

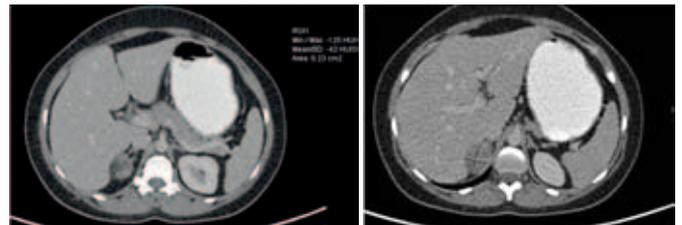


## ADRENAL ANGIOMYOLIPOMA : RARE ENTITY WITH REVIEW OF LITERATURE

**Abstract:** Adrenal angiomyolipoma is a rare entity . Only four cases have been reported to the best of our knowledge till date. We report a 25 years old female who presented with epigastric pain. A computerized tomography (CT) scan showed right adrenal mass with features of angiomyolipoma as suggested by soft tissue density right adrenal mass with fatty component with HU value -125 to -42 HU which is diagnostic. FNAC was done to confirm the diagnosis of adrenal angiomyolipoma. The patient was kept under observation as the size of the tumour was less than 4 cm.

**Introduction:** Angiomyolipoma is a benign mesenchymal tumor consisting of varying amounts of mature adipose tissue, smooth muscle and thick walled blood vessels. It arises from perivascular epithelioid cells and is commonly seen in the kidney. The extrarenal sites reported include the bone, colon, heart, lung, parotid gland, skin, spermatic cord, gynecologic organs and retroperitoneum with the most common extrarenal site being the liver.

**Case Study:** A 25-years old female presented with epigastric pain for which she underwent a routine USG abdomen which revealed a right adrenal mass. There was no evidence of tuberous sclerosis. A computerized tomography (CT) scan showed a well defined soft tissue density, right adrenal mass with fat attenuation with HU value -125 to -42 HU less than 4 cm without evidence of calcification and haemorrhage. Serum catecholamine, cortisol and urinary VMA were within normal limits. As the symptoms presented by the patient are not related to the findings, there is no haemorrhage present and the mass is less than 4cm, the patient is being kept under observation. A USG abdomen will be performed every three months.



**Discussion:** Angiomyolipoma is a benign hamatomatous tumor. About half of the angiomyolipomas are associated with tuberous sclerosis and in these cases, they are usually multiple and bilateral. It has been estimated that approximately 80% of the severe and complete forms of tuberous sclerosis have angiomyolipoma. In the previous reported cases, two were associated with tuberous sclerosis, while the other two, including this case, were sporadic. On CT scan, the presence of even a small amount of fat as evidenced by HU less than 10, suggests the diagnosis of angiomyolipoma. On magnetic resonance imaging (MRI), the typical features of the fatty component include bright signal intensity on non-fat suppressed images, with dropout of signal on fat suppressed images. However, these features can also be seen with other lipomatous tumors (lipoma,

## DHARAMSHILA HOSPITAL AND RESEARCH CENTRE

Dharamshila Marg, Vasundhara Enclave, Delhi - 110 096

liposarcoma, teratoma or myelolipoma) and are not specific for angiomyolipoma. The size of the tumor, despite the clear fat plane between it and the adjacent structures, could not rule out the malignancy. Grossly, angiomyolipomas appear well circumscribed and depending on the relative amount of adipose tissue, they range from a glistening yellow ("fatty") appearance to a more white-tan and firm appearance depending on the relative amount of adipose tissue. Histology typically shows a variable mixture of mature adipocytes, thick-walled blood vessels and spindle and epithelioid stromal cells often radiating out from blood vessel walls. Most angiomyolipomas show predominance of adipocytes but some contain mainly spindle stromal cells and thick walled vessels with little adipose tissue. A diagnostically helpful feature is the staining of the stromal cells for HMB-45 by immunohistochemistry. Management should be the same as that for any adrenal mass. Assessment of functional status of the tumor should be done although all adrenal angiomyolipomas reported so far were nonfunctional. Surgery is indicated if the patient is symptomatic or the tumor is more than 6 cm since the risk of malignancy increases with size. Also, the risk of spontaneous rupture increases with size, owing to the presence of abundant and abnormal elastin-poor vascularity in the tumor. Laparoscopic adrenalectomy is an option and had been successfully done for a 6 cm adrenal angiomyolipoma. Since it is a benign disease, its prognosis is good. Currently, there is no universally agreed protocol on follow-up but an ultrasound three to six months following the surgery with annual clinical examination for large tumors is recommended.

**Dr. Sneha Bhargava**  
MD, FAMS, DMRD (Eng)  
FICRI, FRCR (Lon)  
FNAsc., D.Sc. (Hon. Causa)  
Consultant Radiologist

**Dr. Anshuman Kumar**  
MBBS, MS, MRCS (UK)  
M.Ch Gold Medalist  
Consultant Oncosurgeon

**Dr. Satish Bansal**  
MD (Radiodiagnosis)  
Consultant Radiologist

## STUDER'S CONTINENT URINARY DIVERSION WITH ORTHOTROPIC ILEAL NEOBLADDER IN CASE OF CARCINOMA URINARY BLADDER

### INTRODUCTION

Urinary diversion has a history of nearly 150 years. In 1852, Simon performed the first ureteroproctostomy in a patient with exstrophy.<sup>1</sup> Since then, the procedures have been refined, and the patient outcomes have improved. Urinary tract diversions are separated into two standard categories: noncontinent and continent diversions. Noncontinent diversion with ileal conduit has long been considered the gold standard for urinary diversion but it necessitates an external ostomy (urostomy bag) collecting devices for rest of the life of the patient which is cumbersome to maintain, affect the body image and quality of life of the patients and also includes the cost of the bag which needs to be changed weekly or as an when required.

Orthotopic substitution of the bladder following cystectomy is currently well established. This procedure, which requires a bowel segment, avoids an abdominal stoma and offers an improved quality of life for patients undergoing radical cystectomy for bladder cancer, preserving the body image.<sup>2</sup> In 1989, Studer et al. described low-pressure bladder substitution using a spherical reservoir consisting of four cross-folded ileal detubularized segments.<sup>3</sup> This neobladder uses an afferent isoperistaltic ileal segment with direct ureteroileal anastomosis, which functions as an antireflux mechanism in order to protect the upper urinary tract.

We have adopted the Studer orthotopic bladder substitution following radical cystectomy in patients with muscle invasive bladder cancer. The purpose of this article presentation is to show that Studer's Orthotopic bladder substitution may be an ideal procedure with less complications, providing adequate pouch capacity, good continence and voluntary control of voiding without residual urine, and preservation of renal function. We are presenting a case to demonstrate Studer's Orthotopic bladder as ideal method of urinary diversion.

### CASE REPORT

A 58 yrs old male, came to our hospital with complaints of episode of recurrent haematuria. He underwent TURBT which showed muscle involving high grade urothelial carcinoma. CECT whole abdomen reveals features of multifocal mitotic bladder mass involving both superior and posterior bladder walls with involvement of left vesicoureteric junction causing mild hydronephrosis due to obstruction. After preanaesthetic check up patient underwent radical cystectomy

with studer's orthotopic neo-bladder reconstruction with appendectomy with intra operative freezing of left ureter. Intraoperatively, there was growth in the dome of the bladder with multiple LN on right pelvic region. No extra vesical disease was revealed.

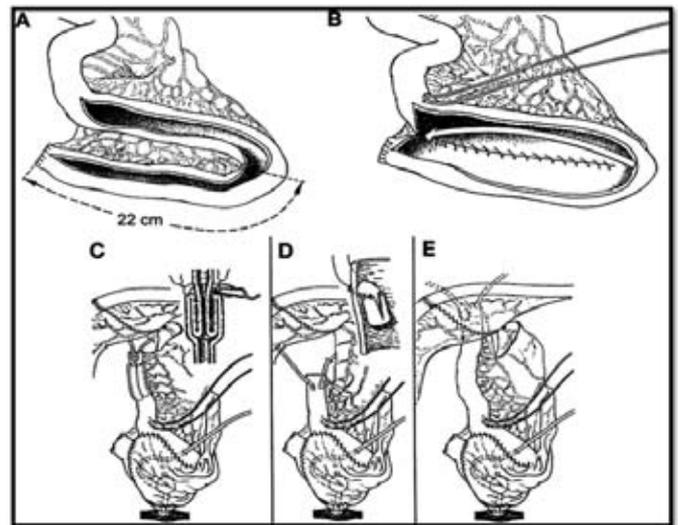
### POST OPERATIVE COURSE AND CONDITION AT DISCHARGE:

Patient developed mild superficial wound infection which healed after dressings.

- Urographin dye study by retrograde manner through foley's catheter and ureteric stent was done on 07<sup>th</sup> post op day which showed no leak (Fig.3).
- Foley's catheter was removed on 13<sup>th</sup> post op day, ureteric stents were removed on 14<sup>th</sup> postop day and patient was discharged as he was able to pass urine voluntarily with no incontinence.
- The patient was instructed to void every 2 hrs., first in a sitting position, by relaxing the pelvic floor and if necessary by abdominal straining.<sup>4</sup> In view of possible difficulty in passing urine, patient was taught CISC (clean intermittent self catheterization).
- Patient was also instructed to take 5 gm of sodabarbonate daily for life long.

Histopathology showed a high grade urothelial carcinoma with areas of necrosis infiltrating the full thickness of the bladder wall involving the perivesical fat in the region of the fundus of bladder and lateral wall. Cut margin of prostatic urethra was free. Four right pelvic lymph nodes (0/4) and five left pelvic lymph nodes (0/5) dissected from the specimen were free of tumor. Two out of four extra right pelvic lymph nodes show tumor metastasis (2/4), pT<sub>3</sub>, pN<sub>2</sub>.

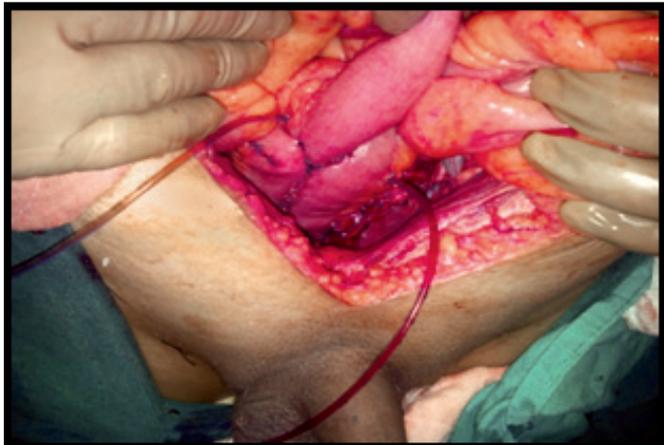
### SURGICAL TECHNIQUE



**Figure No. 1.** Construction of the ileal neobladder (Studer pouch) with an isoperistaltic afferent ileal limb. **A** - A 60- to 65-cm distal ileal segment is isolated (approximately 25 cm proximal to the ileocecal valve) and folded into a U configuration. Note that the distal 40 cm of ileum constitutes the U shape and is opened on the antimesenteric border; the more proximal 20 to 25 cm of ileum remains intact (afferent limb). **B** - The posterior plate of the reservoir is formed by joining the medial borders of the limbs with a continuous running suture. The ureteroileal anastomoses are performed in a standard end-to-side technique to the proximal portion (afferent limb) of the ileum. Ureteral stents are used and brought out anteriorly through separate stab wounds. **C** - The reservoir is folded and over sewn (anterior wall). **D** - Before complete closure, a buttonhole opening is made in the most dependent (caudal) portion of the reservoir. **E** - The urethroenteric anastomosis is performed.

- B/L pelvic lymphadenectomy was done by standard technique. Cystectomy starts with ligating superior and inferior vesicle pedicle. After reaching in the pre-prostatic area we first ligate the dorsal vein of the penis. Then we cut the endopelvic fascia on the lateral side of prostatic capsule and elevate the bunch of periprostatic venous plexus with curved Babcock's forceps, cut after ligation. All the nerve plexus supplying the sphincter and penis going outside the prostatic capsule posteriolaterally, has been saved. Now a plane had been made just aside of seminal vesicle posteriorly and joined with the anterolateral plane. Bladder along with growth excised (Fig.1). Frozen sent from left ureter, which later came out negative for malignancy.
- The technique of the ileal bladder substitution has been described by Studer et al.<sup>5</sup> This is depicted in the figure 1. Briefly, an ileal segment 60 cm in length was isolated ~25 cm proximal to the ileocecal valve. The distal end of the ileal segment, 40-45 cm in length, was detubularized (opened along its

antimesenteric border). The afferent tubular ileal segment was ~20 cm long initially and was later reduced to 14–16 cm. For the construction of the reservoir, the two medial borders of the opened U-shaped distal part of the ileal segment were over sewn with a single-layer seromuscular running suture. The bottom of the U was folded over onto the two ends of the U, thus producing a spherical reservoir consisting of four cross-folded ileal segments. Uretero intestinal anastomoses were performed by the Nesbitt technique in an open end-to-side fashion at the proximal part of the ileal segment. After closing the lower half of the anterior wall and part of the upper half, the surgeon's finger was introduced through the 'window' to determine the most caudal part of the reservoir. A hole with a diameter of 5 mm was cut out of the pouch wall and four 2-0 polyglycolic acid seromuscular sutures were placed between the hole in the reservoir and the edge of the membranous urethra and a 18F silicone urethral catheter was inserted before tying the four sutures at 10, 2, 5 and 7 o'clock positions of the membranous urethra. Before completely closing the pouch, a 'cystostomy' tube using a 22F silicone catheter was placed into the reservoir. The preoperative picture on constructed neobladder is shown in fig.2



**Figure No.2 - Neobladder Placed In Pelvis**

### CONTRAINDICATIONS

The major contraindications to urinary diversion are bowel-type specific. Because of refractory metabolic abnormalities, jejunal segments should be used only in the absence of another acceptable type of bowel segment. Bowel injured by radiation should not be used for diversion. Patients with poor renal function, severe metabolic abnormalities, and significant proteinuria should not undergo diversion with continent reservoirs. Additionally, patients who lack motivation or are unable to catheterize a continent reservoir should not undergo diversion in this manner.



**Figure No.3 Retrograde Cystogram showing Neobladder with Intact Anastomosis**

Because of the potential complications of a continent reservoir versus a noncontinent diversion, the urologist must be aware of the following specific contraindications prior to performing continent diversion:

- Elderly age and spinal cord injuries associated with poor hand coordination are absolute contraindications for continent urinary diversion (including neobladder) because of the need for intermittent catheterization and the potential for catastrophic complications should these individuals fail to do so.
- Bowel abnormalities such as Crohn disease, severe irritable bowel syndrome, fat malabsorption, and potentially ulcerative colitis preclude the surgeon from taking long segments of bowel.
- Patients with a preoperative creatinine clearance of less than 60 mL/min should not undergo continent urinary diversion.
- Those with a prior history of high-dose radiotherapy to the abdomen and/or pelvis should not have long lengths of small bowel used.

### DISCUSSION

- The surgeon should be very familiar with the intended procedure. Occasionally, altering the original plan and performing an alternative type of diversion secondary to individual patient anatomy is necessary. No matter what type of diversion is planned, basic principles of abdominal surgery apply. Thoroughly irrigate the bowel contents after isolating the limb that will be used for diversion. The bowel reanastomosis should be widely patent and should be performed along the antimesenteric segments.
- Detubularizing continent reservoirs and reconstructing them in a more spherical shape is of paramount importance. This procedure allows for greater capacity and most importantly, for reduced storage pressure. In the case of neobladder construction, test the limb that will be isolated for diversion for mesenteric mobility prior to disrupting bowel continuity. Traction on stay sutures in the bowel segment allows the surgeon to determine whether placing the intended neobladder in the pelvis for the urethral anastomosis will be difficult. If difficulty is experienced, the surgeon may counter-incise the mesenteric peritoneum, mobilize the mesenteric pedicle to the root, and in extreme cases, re-flex the operating table to decrease the distance between the pubic symphysis and the umbilicus.
- Stents are recommended to bridge the ureteral anastomosis. When a neobladder is constructed, a urethral Foley catheter and suprapubic tube are left in place. When a continent catheterizable reservoir is constructed, a stenting catheter is left in place in the efferent limb and a suprapubic tube is placed through a separate portion of the reservoir and brought out through a stab incision in the skin. Noncontinent diversion is drained by ureteral stents only.
- Studer Orthotopic neobladder should be the method of urinary diversion provided meets all the criteria.

**DR.GYANENDRA MITTAL**

DNB RESIDENT - SURGICAL ONCOLOGY

**DR.MUDIT AGARWAL**

MS, MRCS Ed,Mch,UICC FELLOW  
SENIOR CONSULTANT - SURGICAL ONCOLOGY

**PROF. (DR.)SHARAN CHOUDHARY**

HOD - SURGICAL ONCOLOGY

REGISTERED WITH REGISTRAR OF NEWSPAPERS UNDER NO. 66509/97  
 REGISTERED WITH DEPTT. OF POST UNDER NO. DL (E)-01/5101/2012-14  
 LICENSED TO POST WITHOUT PRE-PAYMENT NO. U (C)-219/2012-14  
 DUE DATE OF POSTING : 25TH/26TH EACH MONTH  
 DATE OF PUBLICATION OF NEWSLETTER : SAME DATE



## DHARAMSHILA HOSPITAL AND RESEARCH CENTRE

(A unit of Dharamshila Cancer Foundation And Research Centre)

Dharamshila Marg, Vasundhara Enclave, Delhi - 110 096 T +91-11-43066666, 22618675

F +91-11-22617770 E contact@dhrc.in W www.dhrc.in

Join us on **facebook** **HELPLINE** +91-8130000120

If Undelivered Please Return to:  
**Dharamshila Hospital And Research Centre**  
 Dharamshila Marg, Vasundhara Enclave, Delhi 110096

### FACILITIES AVAILABLE

Oncology OPDs	
Medical Oncology	G.I. Oncology
Radiation Oncology	Neuro Oncology
Surgical Oncology	Tumour Board
Gynae Oncology	Pain Clinic
Uro Oncology	Psycho-Social Counseling

#### Cancer Screening

Specialities/Superspecialities/OPDs	
Cardiology	Internal Medicine
Dental	Nephrology & Urology
Dermatology	Neurology & Neuro Surgery
ENT	Ophthalmology
Endocrinology & Diabetology	Orthopaedics
Gynae and Obst.	Paediatrics & Paed. Surgery
Gastroenterology	Plastic Surgery
Gastro Intestinal Surgery	Psychiatry
General & Laparoscopic Surgery	Pulmonology

#### Physiotherapy & Occupational Therapy

#### Audiology & Speech Therapy

#### Health Checkup Packages

Radiodiagnosis and Imaging	
PET CT	
Gamma Camera for Nuclear Scans	
Digital Spiral CT Scanner	
Mammography	
Ultrasonography	
Digital Radiography	
PET CT and Ultrasound guided procedures	

#### Cardiopulmonary Lab

ECGs, TMT, Pulmonary Function Tests (PFT),  
 Holter Test, Echocardiography  
 with Colour Doppler

#### Lab Investigations

Histopathology	Tumour Markers
Cytopathology	Haematology
Frozen Sections	Biochemistry
Immunohistochemistry	Clinical Pathology
Cytochemistry	Microbiology
Ultrasound Guided FNAC	Serology

#### Radiation Oncology

IGRT, IMRT, 3D Conformal Treatment  
 Stereotactic Body Radiation Therapy (SBRT)  
 Stereotactic Radio Surgery (SRS) and  
 Stereotactic Radio Therapy (SRT)  
 Volumetric Modulated Arc Therapy (VMAT)

#### Remote After loading HDR Brachytherapy

#### Treatment Planning Systems

(Eclipse, CMS Xio, Monaco, ERGO++ Plato Sunrise)

Surgical Oncology	
Neuro Oncology	
Head and Neck Oncology	
Breast Oncology	
Thoracic Oncology	
Gynae Oncology	
Musculo-skeletal Oncology	
Plastic, Cosmetic and Reconstructive Surgery	

#### G. I. Oncology

#### Uro Oncology

#### Seven Operation Theatres Complex

#### Endoscopy Suite

#### Post Op. Wards and Surgical ICU

#### Chemotherapy

Normal & High Dose including  
 Dose-intense & Dose-dense  
 Infusional Multiple & Single Drug  
 Bolus Chemotherapies  
 Intra-arterial Chemotherapy  
 Targeted Therapies  
 Immunotherapy / Biological Therapies  
 Hormonal Therapies  
 Neutropenic Care  
 Nutritional Therapy  
 Palliative and Supportive Care

#### Pharmacy

Blood Bank	
Packed Red Cells	Whole Blood
Single Donor Platelets	Fresh Frozen Plasma
Platelet Concentrate	Stem Cells

#### Wards

Super Deluxe	Deluxe
Semi Deluxe	Single
Double	Semi Paying
Economy	Indigent

#### ICU (Medical & Surgical)

#### Academics

DNB Programmes  
 (Medical, Radiation & Surgery)  
 Fellowship Programme for Head & Neck  
 Oncology and Onco Pathology  
 Post Basic Diploma for Nursing Oncology  
 Diploma Courses for Technicians  
 Outreach Programmes on Cancer  
 Awareness, Education & Detection  
 Continuous Medical Education  
 Cancer Information Literature

#### Research

#### Support Services

Prayer Room, Peace Room  
 Guest House

#### Dietary Services

Cafeteria, Kitchen, Dining Hall etc.