



# HOLY FAMILY HOSPITAL NEW DELHI

## NEWSLETTER

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*Dedicated to the Greater Glory of God and  
to the cause of suffering humanity*

## STRESS AND HOW TO DEAL?

*Dr. Sanjay Sood, Sr. Consultant  
Department of E.N.T.*

Stress may be defined as a real or interpreted threat to the physiological or psychological integrity of an individual that results in physiological and/or behavioural responses. In biomedicine, stress often refers to situations in which the adrenal glucocorticoids and catecholamines are elevated because of an experience. Stress is also a subjective experience that may or may not correspond to physiological responses.

Stress is described by Dr. Hans Selye as a non-specific response of the human body to any demand being made. Psychologists defined stress as an internal state which can be caused by physical or psychological demands on the body or by environmental and social situations which are evaluated as potentially harmful, uncontrollable or exceeding the individuals resources for coping.



Medically, stress is a sum of the biological reactions to an adverse stimulus which may be internal or external, physical, mental or emotional thus tending to disturb the homeostasis. Stress may produce behavioural, physiological and emotional changes along with cognitive impairments which may in turn act as stressors aggravate the stress cycle. Type A personality i.e. aggressive, more ambitious not in hurry people handle stress well. Behavioural changes like lack of sleep or insomnia, alcoholism, overeating or under eating, avoidance or agitated behaviour. Physiological changes like lethargy, tiredness, headaches and body aches, blurred vision, discomfort in stomach, nausea, hypertension, sweating, dry mouth and hyperventilation. Emotional changes like low mood, flight of thoughts, irritability, anxiety, depression, fear and anger. Cognitive changes like distraction, memory problems and lack of concentration.

Body reacts to stress in three stages:

1. Alarm reaction is an immediate and emergency response of the body mediated by sympathetic nervous system.
2. Resistance stage where body begins to resist the effects of the stress stimulus and hormonal responses are the important line of defence and there is increased activity of adrenocorticotrophic axis.
3. Exhaustion stage is the final stage as body capacity to respond to the continuous stress is seriously compromised. Serious health related problems may occur like gastric ulcer, asthma, hypertension and many more.

It is important to save ourselves from stress and the negative effects of the stressful conditions. The key to handle stress is to cultivate positive habits as a routine like

1. Be in positive surroundings and avoid negative thinking and negative thinking people.
2. Develop confidence in self and people around us.
3. Positive thoughts and positive language.
4. Learn to come out of the fear of failure, rejection.
5. Physical exercises give us physical and mental strength. It also acts as a diversion.
6. Food habits such as balanced diet nourishes our body and it is important to drink enough water
7. Breathing exercises like pranayama done regularly help us to relax and maintain mental balance.
8. Yogic exercises are a scientific form of blended breathing and physical exercises to improve circulation to the brain and able to increase the energy level.
9. Meditation changes the living and diverting the mind which has a lasting effect. Meditation is a vedic exercises that result in mental, physical and general well-being. It helps in better coordination between body and mind and produces a deep state of relaxation and tranquillity resulting in reduction of stress and its effects.
10. Developing other interests like music, reading, gardening etc provides mental relaxation.

There are numerous ways to handle the stress and every individual can develop his or her own methods to deal with the stressful stimulus. “All life is an experiment. The more experiments you make the better”.

## Department of Neurosciences

### Department of Neurosurgery (Spine & Neuroscience Centre):

It is one of the most modern and comprehensive centres for over five decades treating diseases affecting brain spine and peripheral nervous system. Neurosurgery centre is equipped to treat brain tumours, head injury, neurovascular, paediatric and functional disorders. Spine centre offers surgical treatment for cervical & lumbar disc herniation, canal stenosis, spondylosis, spinal trauma, tumours tuberculosis and congenital deformities supported by neuroradiology & neuro-intensive care facilities.

#### **Milestones:**

1. Successful removal of pituitary tumours endoscopically through nose with immediate return of vision after surgery.
2. Spine surgery with one inch incision.
3. Trigeminal neuralgia surgery with two incision with dramatic relieve of pain.

#### **Clinical Team:**

Dr. Swatantra Mishra MS, MCh (PGI Chandigarh), Dr. Dhruv Chaturvedi MS, MCh (AIIMS)

## Department of Neurology:

Department of Neurology of this hospital is one of the oldest in the city and has been providing cost-effective healthcare to all. On the diagnostic front, all Neuro-Electrophysiological tests are performed in the department namely Nerve Conduction Studies (NCV), Electromyography (EMG), Repetitive Nerve Stimulation (RNS) studies, Facial nerve conduction and blink reflex studies.

Visual Evoked Potentials (VEP) studies, Brainstem Evoked Response Audiometry (BERA) studies and Somato-Sensory Evoked Potentials (SSEP) studies. Routine and sleep deprived Electro-encephalography (EEG) studies are performed in outpatient department.

Separate Portable EEG system is used to record EEG in ICU for highly critical neurological and neurosurgical patients.

There is facility for nerve and muscle biopsy for in-patients.

Botulinum toxin (Botox) injections are used for various disorders with or without EMG guidance.

All neurological patients suffering from headache, epilepsy, stroke, brain infection, movement disorders, spinal disorders and neuro-muscular disorders are admitted and treated here. A high quality services is attempted with a sound back up from diagnostic CT scan and MRI scan available inside the hospital. Presently this department has three active senior consultants.

#### **Clinical Team:** Dr.R.R.Pandey, Dr.N.Sai Ram and Dr. Monica C.

## Department of Psychiatry:

Psychiatry department is one of the oldest departments of the hospital and for last ten year it is registered with state mental health authority under mental health Act (1987) to have ten indoor beds facility.

Department provides indoor and outpatient services to patients suffering from various psychiatric illnesses including Anxiety, Depression, Mood Disorders, Schizophrenia, Obsessive, Compulsive Disorder dementia, Psychosexual disorders, Drug & Alcoholic Deaddiction, Marital and Relationship Problem Psychosomatic illnesses etc.

#### **Clinical Team:** Dr. Neelam Kumar Bohra (DPM, MD), Dr. Neena Bohra (DPM, MD)

Dr. Anandi Lal (MD), Dr. Amitabh Saha (DPM, MD) and Dr. Sudhir K. Khandelwal (MD, MNAMS, MRCPsych)

## Clinical Psychology

One in five people suffer from emotional problems sufficiently distressing to justify seeking professional help. Symptoms can range from relatively mild feelings of depression and anxiety to severe distress and dysfunction. Clinical Psychologists and psychotherapists are concerned with all aspects of behavior, thought, emotions and learning. Department of Clinical Psychology at Holy Family Hospital provides psychotherapy for emotional/behavioural issues, and psychological assessment for developmental issues, academic concerns, intelligence and personality. Psychological assessment helps in identifying global intellectual delays, Autism, Specific Learning Disorders (SLDs like Dyslexia, Dysgraphia and Dyscalculia) as well as emotional/behavioral concerns like ADHD (Attention Deficit Hyperactivity disorder). The clinical team includes:

#### **Clinical Team:** Ms. Nisha Sachdeva and Dr. Manju Mehta

## ANEURYSMAL SUBARACHNOID HAEMORRHAGE

**INTRODUCTION:** Anterior communicating artery aneurysms are the most common type of aneurysms in cerebral circulation. They account for almost 30% cases of total aneurysms found in the brain. They are the single most common site of aneurysms presenting with subarachnoid haemorrhage. Other manifestations include mass effect, cranial nerve palsies, visual loss, weakness, minor haemorrhages, seizures, and headache. Diagnosis is made with NCCT brain in case of haemorrhage or with the help of angiography in which both the carotids should be evaluated. Treatment options range from less invasive endovascular techniques to open surgical methods.

The author presents a case of Anterior communicating artery aneurysm with hypoplasia of the A1 segment of the right anterior cerebral artery. Diagnosis and treatment options are discussed.



Dr. Dhruv Kr. Chaturvedi  
Sr. Consultant  
Dept. of Neurosurgery

**CASE REPORT:** A 45-year-old female was admitted to our hospital with worsening weakness of lower limbs, irrelevant talks, agitation, and headache. Neurological examination revealed weakness (power 3/5) and increased deep tendon reflexes of both legs, with positive ankle clonus and Babinski sign. NCCT brain revealed subarachnoid haemorrhage. Magnetic resonance (MR) angiography of the brain revealed small aneurismal outpouching abutting A1 and A2 segment of left anterior cerebral arteries with inadequately visualized anterior communicating artery; s/o ACOM aneurysm with broad neck (Fig 1). In view of the broad necked aneurysm, patient was given an option of clipping rather than coiling. Left pterional craniotomy was done and clipping of aneurysm was done. Intraoperative period was uneventful. Postoperatively symptoms of patient were relieved.

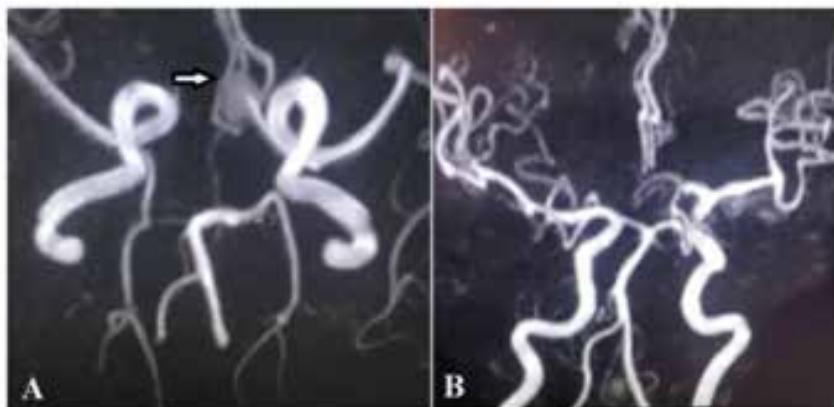


Fig 1: A, aneurysm of the anterior communicating artery (arrow). B, Post clipping.

**DISCUSSION:** Anterior communicating artery aneurysm is one of the most complex aneurysms of the brain. Incidence is 4% in general population with around 63 % rupture rate. Main symptoms of the anterior communicating artery aneurysm is characteristic headache described as “*bolt from the blue*” and neck stiffness, and a subarachnoid haemorrhage often found through NCCT/MRI scans. If NCCT head is negative but there is a strong suspicion of aneurysm, a lumbar puncture should be done. Key to success is a detailed preoperative preparation and surgical planning and postoperative care. Surgical treatment of anterior communicating artery aneurysm requires detailed imaging, including CT, IADSA (intra-arterial digital subtraction angiography). 4 VESSEL IADSA is the gold standard investigation, other modalities includes CT angiography or MR angiography. Medical management includes fluids, absolute bed rest, no NSAIDs, steroids, and nimodipine. Definitive management includes endovascular coiling and surgical clipping. It is an absolute emergency and definitive treatment (coiling/clipping) should be considered as early as possible.

## Cranio-vertebral Junction Tuberculosis with Atlantoaxial Dislocation in a pregnant lady

### INTRODUCTION

Cranio-vertebral junction (CVJ) tuberculosis is an uncommon disease, accounting for only 0.3% to 1% of tuberculous spondylitis. Clinical manifestations range from mild or nonspecific symptoms to severe instability and neurological complications. Diagnosis may be difficult and management can be challenging, requiring different treatment modalities depending on the clinical symptoms or radiological features. Treatment options are also controversial without well-defined guidelines, including a conservative approach (anti-tuberculosis medication and external fixation), relatively simple surgery (posterior fusion and fixation), or radical surgery (debridement, decompression and stabilization).

The author presents a case of CVJ tuberculosis with atlantoaxial dislocation (AAD) and retropharyngeal abscess. The diagnosis and treatment options are discussed.



Dr. Dhruv Kr. Chaturvedi  
Sr. Consultant  
Dept. of Neurosurgery

### CASE REPORT

A 20-year-old female with 28 weeks pregnancy was admitted to the hospital with three days history of worsening neck pain and quadripareisis following an event of fall in bathroom. Her pain was aggravated by moving or walking but was relieved by bed rest. Neurological examination revealed weakness (power 2/5 in all 4 limbs) and exaggerated deep tendon reflexes of both arms and legs, with positive ankle clonus and Babinski sign. Laboratory test revealed leucocytosis and raised ESR. Chest radiography showed no evidence of any pulmonary lesion.

Magnetic resonance (MR) imaging of the brain and cervical spine revealed altered signal intensity in contiguous C1, C2 and C3 vertebrae and clivus, irregular osseous erosions, bilateral pre/paravertebral, periodontoid and epidural soft tissue abscesses suggestive of infective spondylitis, most likely of tubercular etiology.



Fig 1. A: Preoperative MRI suggestive of destruction of C1-3 and abscess, B: Post-operative MRI, C: Postoperative radiograph.

Transoral decompression of the diseased bone and granulation tissue (odontoidectomy) along with posterior fixation was done. After the operation, the patient had no neck pain and improvement in quadripareisis. Intraoperative anaesthetic period was uneventful and fetal heart rate was monitored throughout the procedure. Histopathology was suggestive of granulomas (AFB negative).

### DISCUSSION

Cervical Pott's disease is unusual. Furthermore, CVJ tuberculosis has been reported to affect 0.3% to 1% of all Pott's disease patients. Evidence of systemic symptom may be absent and early complaints may involve pain or stiffness in the neck. Diagnosis may be delayed until signs of advanced disease develop. AFB smear and culture are reported to be positive in less than 50% of cases. Histological study has shown granulomatous tissue with or without caseation necrosis in approximately 75% of cases. In this case, *M. tuberculosis* was not isolated by conventional culture of pus and tissue specimen. The diagnosis was confirmed by clinical and pathologic findings.

The spread of tuberculosis infection usually takes a retrograde route, reaching the crano-vertebral joints. Subsequently, the infection causes destruction of the bony and ligamentous structures, and eventually produces cervico-medullary neural compression and occipito-cervical or atlantoaxial instability. The occipito-atlanto-axial complex has a wide range of motion, accounting for approximately 80 degrees of rotation and significant flexion. The destruction of this complex can cause abnormal translational and rotational movements, leading to severe morbidity and even death. In this case, the patient presented with severe progressive neck pain, indicating instability.

The treatment options for CVJ tuberculosis have been controversial, from an absolute conservative approach to radical extirpation, inconsistency is mainly due to the absence of well-proposed guidelines; however, it is also true that the symptomatic or radiological features of this disease may be diverse enough to justify several definite treatment modalities. Furthermore, the choice of intervention has depended largely on the surgeon's preference. Many authors favored anti-TB medications with or without external immobilization in case of minimal bone destruction and minimal neurologic deficit. Gupta et al concluded that surgery was not necessary, even in patients with advanced stage of disease (retropharyngeal abscess with or without AAD, gross bony destruction or angulation) on the base of their experience of more than 3 decades. But, many reports stress surgical treatment when there are neurological symptoms due to cord compression or significant degree of instability, AAD or bone destruction. Many authors recommend posterior fusion and fixation and/or anterior decompression especially when anterior cord compression or irreducible AAD existed. In this case, the management plan followed a radical operation line (anterior decompression, posterior fusion and fixation) because the patient showed neurological deficit due to cord compression, significant bony destruction and AAD. The patient had no posterior neck pain and improved quadripareisis after surgery.

## CONCLUSION

In this rare case of CVJ tuberculosis, the authors could get satisfactory outcome with one stage operation in a patient with neurological deficit due to cord compression, extensive bony destruction and AAD

## SUCCESSFUL CABG AT HOLY FAMILY HOSPITAL

The cardiothoracic department at Holy Family Hospital has been in place and doing closed heart surgery, Thoracic and vascular surgery for several decades. Under the leadership and guidance of Fr. George P.A., Director and Dr. Sumbul Warsi, Medical Superintendent, it was decided to develop state-of-the-art facilities to run Open Heart Surgery programme. The department took a measure step forward when the first open heart surgery, coronary artery bypass (CABG), was performed by Dr. V.K. Sinha and his team on 2<sup>nd</sup> February, 2017. Patient had uneventful recovery and was discharged on 5th post-operative day.



Dr. V.K. Sinha  
Sr. Consultant  
Dept. of CTVS

Dr. V.K. Sinha has extensive experience of over thirty years in India and abroad. It is also a great privilege to have support of strong cardiology department headed by renowned cardiologist Dr. Mohan Nair. The department is well equipped with state-of-the-art facilities to handle all types of valve repair/replacement surgery, coronary bypass surgery (CABG), congenital defect-repair surgery, aortic surgery and redo surgery. The nursing staff, technician and paramedics are fully trained as well experienced.

## NEPHROLOGY DEPARTMENT

Nephrology department at Holy Family Hospital, established in 1990, provides treatment to diverse kidney ailments. Treatment is extremely affordable while maintaining highest standards of care. We are doing around 18,000 dialysis sessions in a year.

We are providing treatment on outdoor (OPD) and indoor (IPD) basis for kidney disorder. sort of diagnostics are available in Holy Family Hospital related to Kidney disorders.

**Facilities available in the hospital:** Hemodialysis: We have recently commissioned a new large hemodialysis unit with 25 stations with best and latest hemodialysis machines. Centre is following international (AAMI) and national (ISN) guidelines to maintain high standards of care. Hospital is providing hemodialysis round the clock and for all emergencies.

**Sustained low efficiency dialysis (SLED):** usually being done in sick patients admitted in ICU. Two dialysis stations are dedicated for ICU patients.

**Acute peritoneal dialysis:** Short-term peritoneal dialysis usually being performed in sick admitted patients.

**Continuous ambulatory peritoneal dialysis (CAPD):** CAPD in home based long term dialysis. This therapy is a good alternative to hemodialysis and cost effective as well.

**Clinical Team:** Nephrology department is having full time as well as visiting nephrologists on board. A team of Senior Residents, Junior Residents and 24 dialysis technician/nurses are working under supervision of Senior Consultant Nephrologist.

**Dr. Anil Prasad Bhatt (Senior Consultant)**

**Dr. Bheema Raj Gupta (Consultant)**

**Dr. Imtiyaz Mir (Dialysis Medical Officer)**

**Future Plans:** We are looking forward to establish an affordable kidney transplant programme in near future.

## RAPIDLY PROGRESSIVE GLOMERULONEPHRITIS (RPGN): EARLY IDENTIFICATION IS THE KEY

Dr. Anil Prasad Bhatt, Dr. Bheem Raj Gupta, Dr. Imtiyaz Mir, Department of Nephrology, Holy Family Hospital

Rapidly progressive glomerulonephritis (RPGN) leading to rapidly progressive renal failure, is one of the nephrology emergencies which needs special attention. RPGN is a clinical description which determines by symptoms and signs of glomerulonephritis; edema, hypertension and microscopic or gross hematuria, and evidence of acute renal failure. Definite diagnosis of the disorder is based on kidney biopsy findings. Early diagnosis and appropriate treatment plays a critical role in renal saving and preventing permanent glomerular damage

Here are some cases presented to us as RPGN for illustration.

### Case 1

BSB, 45 year old obese male, farmer, presented in Medicine OPD in July 2012 with complaints of backache for few months and pedal edema for 3 months. There was no fever, cough, SOB, rashes, decreased urine output and no history of DM, HTN, TB, or jaundice. He was a chronic smoker and alcohol drinker.

His initial investigations revealed Hb 14.2, TLC 15000/mm<sup>3</sup>, Platelet 2.35 lakh/mm<sup>3</sup>, ESR 59, Urea 71 mg/dL, Creatinine 1.4 mg/dL, FBS/PPBS 102/155 mg/dL, Chol 299, S Prot /Alb 6.8/2.4, Urine Alb +++, WBC 8-10, RBC



Dr. Anil Prasad Bhatt  
Sr. Consultant  
Dept. Nephrology

Full field. Chest radiograph was normal. He revisited two weeks later on and found to have persistent proteinuria and hematuria. He visited nephrology OPD after 2 weeks with advanced renal failure with serum creatinine of 14.2 mg%. A working diagnosis of RPGN leading to rapidly progressive renal failure was made.

At admission, he was afebrile, normotensive, mild pedal edema and multiple folliculitis present over neck with multiple scars of healed over chest/back. Rest systemic examination was unremarkable. Patient was started on pulse IV methylprednisolone, IV cyclophosphamide. He underwent daily plasma exchanges for 6 days. ANA, ds-DNA, ANCA-C/P, Anti GBM, viral markers for HBV, HCV and HIV were negative. Complement levels C3/C4 were normal. 24 hour urinary protein was 3.3 g. HbA1c was 6.5 and fundus examination was normal. He underwent kidney biopsy which was suggestive of diffuse mesangoiproliferative glomerulonephritis.

With therapy renal function improved and was discharged after 10 day on oral cyclophosphamide and prednisolone. Serum creatinine improved to 1.2 mg %. Three months later he was admitted with pneumonia and septic shock and acute kidney injury. He recovered with prompt antibiotic treatment. Cyclophosphamide changed to azathioprine in follow up. Immunosuppression discontinued after one year. Patient is maintaining normal renal functions till last follow up 3 months back.

### Case 2

RD, 35 year old, housewife from Bihar, presented in September 2013 with complaints of decreased appetite for 3 months, nausea and vomiting for 1 month, marked weight loss of 12 kg over 3 months and pain in abdomen and headache for 1 week. There was no history of fever/cough/breathlessness/rashes or oliguria. There was no past history of DM, HTN, TB, jaundice. She underwent hysterectomy 2 years back for fibroid.

Investigations revealed progressive rise in urea and creatinine, with active urinary sediments of proteinuria and hematuria, and normal US KUB. On examination she was of lean built, afebrile, normotensive, with mild pallor and no edema. Systemic examination was unremarkable. A working diagnosis of RPGN leading to rapidly progressive renal failure was made.

She was admitted and treatment started with pulse IV methylprednisolone and oral cyclophosphamide. Kidney biopsy was done, suggestive of paucimmune crescentic glomerulonephritis. Her serum creatinine came down from 3.7 mg% to 2.6 mg% at time of discharge. Her renal function improved to normal. Gradually immunosuppression tapered and stopped over 2 years and patient was maintaining normal renal function till last follow up 2 months back.

### Case 3

MD, 55 years, housewife from Uttarakhand admitted in January 2013 with complaints of weakness, bodyache, constipation, decreased appetite for 2-3 weeks. She was severely anaemic with Hb 6.9 g%, high ESR 103, mild azotemia S. Cr 1.3 mg%, with active urinary sediments. Stool for occult blood was negative. UGI endoscopy was normal, Chest radiograph and US abdomen was normal. She took discharge on request with S creatinine of 1.8 mg %. She remained symptomatic and reviewed in nephrology OPD after 3 weeks. Her p-ANCA serology was strongly positive. She was admitted and underwent kidney biopsy which was suggestive of paucimmune focal necrotizing glomerulonephritis. She was treated with pulse methylprednisolone and oral cyclophosphamide. Patent responded to therapy with improvement in renal function. She is in follow up and doing well on azathioprine and prednisolone, maintaining her creatinine around 1 mg%.

## Discussion

RPGN is classified pathologically into 3 categories, as follows: (1) anti-GBM antibody disease (approximately 3% of cases), (2) immune complex disease (45% of cases), and (3) pauci-immune disease (50% of cases). Immunologic classification is based on the presence or absence of ANCA. The disorders are also classified based on their clinical presentation.

<b><i>Anti-GBM antibody 3%</i></b>	<b><i>Immune complex 45%</i></b>
Goodpasture syndrome (lung and kidney involvement)	Postinfectious (staphylococci/streptococci)
Anti-GBM disease (only kidney involvement)	Collagen-vascular disease
10-40% of patients may be ANCA positive.	Lupus nephritis
	Henoch-Schönlein purpura (immunoglobulin A and systemic vasculitis)
	Immunoglobulin A nephropathy (no vasculitis)
	Mixed cryoglobulinemia
	Primary renal disease
	Membranoproliferative glomerulonephritis
	Fibrillary glomerulonephritis
<b><i>Idiopathic</i></b>	
Of all patients with crescentic immune complex glomerulonephritis, 25% are ANCA positive; however, less than 5% of patients with noncrescentic immune complex glomerulonephritis are ANCA positive.	
Pauci-immune 50%	
Wegener granulomatosis (WG)	
Microscopic polyangiitis (MPA)	
Renal-limited necrotizing crescentic glomerulonephritis (NCGN)	
Churg-Strauss syndrome	
80-90% of patients are ANCA positive	

**Histopathology** should be accompanied by appropriate serology. On histopathology there is vasculitis which involves glomerular capillaries and hallmark histologic lesions are crescents. Fibrinoid necrosis is found in severe form.

Histopathology characteristics on immunofluorescent microscopy

1. Anti GBM : Linear IgG
2. Immune complex-mediated GN : granular glomerular immuno- globulins and/or complements
3. Pauci-immune : mild or absent glomerular stain

More than 80% of patients with pauci-immune rapidly progressive glomerulonephritis were subsequently found to have circulating antineutrophil cytoplasmic antibodies (ANCA), and, thus, this form of rapidly progressive glomerulonephritis is now termed ANCA-associated vasculitis.

**Pathogenesis** of ANCA-AV: ANCA are directly involved in the pathogenesis however the link is unclear. ANCA induce a premature degranulation and activation of neutrophils.

**Wegener granulomatosis:** Upper airway lesions, pulmonary infiltrates, and rapidly progressive glomerulonephritis. Histologically there is granulomatous inflammation. 80-90% have findings positive for ANCA and almost all have a cANCA (anti-PR3).

**Churg-Strauss disease:** Allergic asthma and eosinophilia with RPGN, 70-90% patients are positive for ANCA, primarily pANCA.

**Microscopic polyangiitis:** Pulmonary infiltrates and rapidly progressive glomerulonephritis, often coupled with musculoskeletal system abnormalities or with neuropathy or central nervous system abnormalities. 80-90% have positive findings for ANCA and almost all have a pANCA (anti-MPO)

### Symptoms of ANCA-AV

Prodrome is flulike symptoms characterized by malaise, fever, arthralgias, myalgias, anorexia, and weight loss. This occurs in more than 90% of patients and can occur within days to months of the onset of nephritis or other manifestations of vasculitis. Following the prodrome, the most common complaints are abdominal pain, painful cutaneous nodules or ulcerations, and a migratory polyarthropathy. When pulmonary or upper airway involvement is present, patients complain of sinusitis symptoms, cough, and hemoptysis.

**Lab workup :** CBC, ESR, CRP, KFT, LFT, Urine R/M, 24 Hr Urine Protein, ANA, C3, ANCA C&P, Cryoglobulin, Viral markers for HBV, HCV, HIV, Serum protein electrophoresis, CXR-PA, US Abdomen.

### Treatment

1. Pulse i.v. methylprednisolone followed by oral prednisolone.
2. I.V. or oral cyclophosphamide, and azathioprine once disease is controlled.
3. Plasmapheresis may be a beneficial addition to therapy for severe renal failure.
4. Rituximab may improve renal outcomes in ANCA-AV.
5. *Pneumocystis* prophylaxis with trimethoprim-sulfamethoxazole.

### Conclusion

1. Predictor of renal survival is the serum creatinine value at the time of diagnosis.
2. Early referral improves outcome.
3. Untreated progress to ESRD requiring dialysis or kidney transplant.
4. Strong clinical suspicion: Early initiation of immunosuppressive treatment.
5. Major cause of death is infectious complications.

## Quiz 2.1

A 52 year old man, with a common endocrinological disorder on therapy, presents with this.

**Answer of last quiz: Ethmoidalencephalocele.**

Kindly send your answers at:  
[newsletter@holyfamilyhospitaldelhi.org](mailto:newsletter@holyfamilyhospitaldelhi.org)



## Urology Department

Urology department in our hospital was the first in South Delhi to start the endoscopic urological surgeries way back in 1980. We are dealing with all kinds of renal, uretric, urinary bladder and prostate surgeries including malignancies and male infertility. Procedures routinely performed: **Laser Prostatectomy, TURP, URSL, PCNL, & VIU** (Endopyelotomies, Microsurgical Varicocele Ligation).

**Clinical Team:** Dr A.K.Kaushik, Dr R.L.Nayak and Dr R.K.Choudhuri

### LASER ASSISTED PROSTATECTOMY

For some time, the criterion standard treatment for BPH has been TURP and the standard. But TURP is used less frequently now, because of associated bleeding and TUR syndrome.

Additionally, the preponderance of urology patients taking chronic oral anticoagulants and anti-platelet therapy mandate the need for techniques that can be safely performed in this setting.

In general, the laser prostatectomies mentioned below have added safety and less perioperative pain compared with TURP.

Vaporization techniques, particularly **Greenlight PVP**, has achieved widespread popularity, largely because of its ease of use and the ability to perform these procedures on an one day-care basis.

**DioLAV(Diode Laser Vaporisation)** is also a viable vaporization technique and in fact showed essentially equivalent efficacy and complication rates when compared with Greenlight PVP.

**DioLEP(Diode Laser Enucleation of Prostate)** requires the most technical expertise with a correspondingly steep learning curve but is likely the optimal endoscopic approach. Although efficacious, none is efficacious enough to make the old-fashioned TURP obsolete.

Diode laser enucleation of the prostate (DioLEP) has been used for over 10 years and is generally done using the high-powered (100 W) Diode laser. The expanding adenoma in BPH creates a natural tissue plane which can be exploited surgically both during open prostatectomy and endoscopic (DioLEP) surgery.

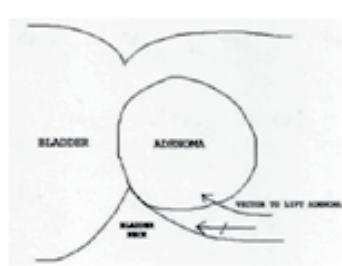
The current technique initially involves division of the prostate into its three anatomical lobes in most cases. Each lobe is then enucleated in a retrograde fashion, creating the same defect as is achieved with open prostatectomy. After haemostasis, a transurethral resection is used to extract the enucleated adenoma from bladder.

The lithotomy position is used, with the hips flexed to 90°; this allows free rotation of the resectoscope, which is necessary to follow the plane of enucleation. The well-lubricated urethra is dilated up to 28 F as the laser continuous-flow resectoscope is 26 F.

Preliminary cystoscopy is used to ascertain the size and configuration of the prostate, and to assess the patient for other pathology such as bladder calculi.

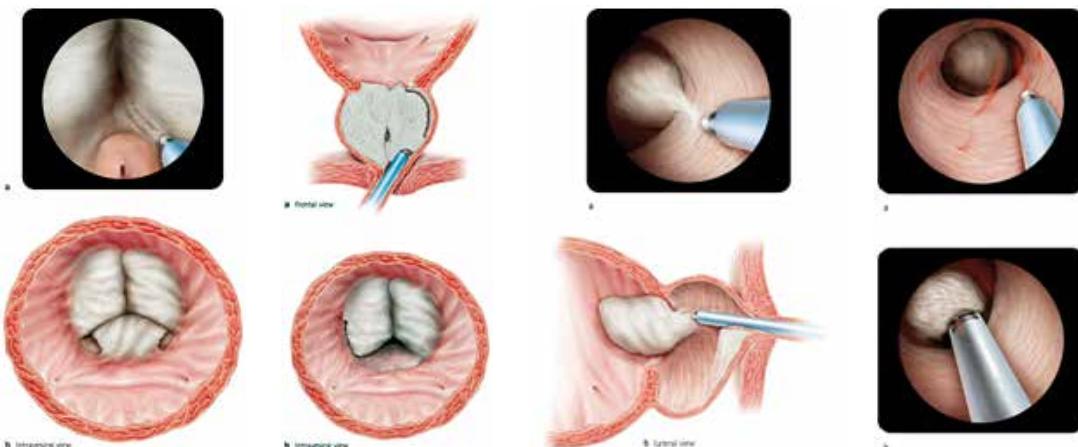


Dr. Anirudh Kaushik  
Sr. Consultant  
Dept. of Urology



Bilateral bladder neck incisions are then made, extending from the ureteric orifices to the verumontanum. These are deepened down to the level of the surgical capsule, which can be clearly identified as a smooth fibrous layer. If no median lobe is present, a single incision can be made at the 6 o'clock position. Throughout the procedure, haemostasis is obtained using the defocused laser as each of the bleeding vessels is encountered.

Once the incisions are complete, the median lobe is enucleated starting at the verumontanum. The incisions are connected just above the verumontanum and the fibres connecting the median lobe to the capsule are divided, working side-to-side between the incisions. The beak of the resectoscope is used to elevate the lobes and provide counter-traction while working beneath it. The lobe is disconnected at the bladder neck and placed in the bladder for later TUR resection.



The lobe is released into the bladder and haemostasis is obtained by individually coagulating each bleeding vessel with the defocused beam.

A 20 F, 3-way Foley catheter is placed at the conclusion of the case with the aid of a catheter guide. As continuous bladder irrigation is seldom

required, the third port is plugged; however, it remains available should the need for irrigation arise.

At Holy Family Hospital in Dept. of Urology, 65 Patients underwent Laser assisted prostatectomy using Diode Laser. There prostate wt. ranging from 28gm to 115gm. Serum PSA ranging from 0.3 to 28, with all raised PSA having undergone pre-Op needle Biopsy of prostate. There were no major complications or haematuria requiring transfusion.

## LIGHTER MOMENTS

**PATIENT: THE PROBLEM IS THAT OBESITY RUNS IN OUR FAMILY.**  
**DOCTOR: NO, THE PROBLEM IS THAT**  
**NO ONE RUNS IN YOUR FAMILY.**



**Doctor:** You should take at least 10 Glasses of water every day.  
**Patient:** It is Impossible.  
**Doctor:** Why?  
**Patient:** I have only 4 Glasses at home..!

## MONTHLY FREE FIBROSCAN CAMP AT HOLY FAMILY HOSPITAL

Non-alcoholic fatty liver disease (NAFLD) is a very common disorder and refers to a group of conditions where there is accumulation of excess fat in the liver of people who drink little or no alcohol. The most common form of NAFLD is a non-serious condition called fatty liver. In fatty liver, fat accumulates in the liver cells. Although having fat in the liver is not normal, by itself it probably does not damage the liver. A small group of people with NAFLD may have a more serious condition named non-alcoholic steatohepatitis (NASH). In NASH, fat accumulation is associated with liver cell inflammation and different degrees of scarring. NASH is a potentially serious condition that may lead to severe liver scarring and cirrhosis.

Non-alcoholic fatty liver disease (NAFLD) is one of the most common causes of chronic liver disease globally. Prevalence of the disease is estimated to be around 9-32% in the general Indian population, with a higher incidence rate amongst obese and diabetic patients.

In India, increasingly NASH is also being seen in apparently thin built individuals, the so called ‘Lean NASH’, which is more difficult to diagnose clinically.

Traditionally NAFLD used to be diagnosed based on Liver Biopsy, which was a painful invasive investigation, fraught with potential risks. However with the advent of Transient Elastography the diagnosis of Liver Fibrosis has become simple, quick and painless. However elastography machines are still very expensive and the test routinely costs more than a traditional liver biopsy.

Transient Elastography (TE) (FibroScan; Echosens, Paris, France) is a new tool, designed for the non-invasive study of liver stiffness. TE uses an ultrasound transducer probe, mounted on the axis of a vibrator. Vibrations of mild amplitude and low frequency are transmitted by the transducer, inducing an elastic shear wave, which propagates through the underlying tissue. Pulse-echo ultrasound acquisitions are used to follow the propagation of the shear wave and to measure its velocity, which is directly related to tissue stiffness. Transient elastography measurements of liver stiffness are expressed in kilopascals (kPa).

Keeping in view the increasing prevalence of this disease and the potential benefits of an early diagnosis in preventing Cirrhosis, the Department of Gastroenterology at Holy family Hospital has started a free Fibro scan camp every month. Patients attending the OPD who have sero-negative transaminitis or fatty liver on routine ultrasonography, are advised to report to the Gastroenterology OPD at 2 pm on the last Wednesday of the month with a few hours fasting state. The patients are prepared by an OPD staff nurse, and a trained technician conducts the test, records patient detail and issues the printed report by hand immediately. The patient is then asked to follow up with the primary consultant in charge for further management. Since April 2016, we have conducted a total of nine free fibro scan camps at Holy Family Hospital in the General OPD. A total of 190 patients have been screened. Various stages of liver disease, from mild fibrosis to frank cirrhosis, have been diagnosed and appropriate therapy initiated.



Dr. Faiz Ahmad  
Sr. Consultant  
Dept. of Gastro.

## PHYSICAL ACTIVITY AND ADVENTURE TO IMPROVE YOUR MENTAL HEALTH

Since ancient times, there has been a premium on one's physical health. There have been many iconic heroes in Indian and Greek mythology with enormous physical prowess. Bollywood heroes with muscular bodies have always commanded admiration, and in recent past it has become a trend to show one's 8-pack abs throughout the movie. Mythological figures and filmi heroes toiled hard to develop well-honed bodies. Ironically, however in earlier times a great body was accepted to harbour a feeble mind. The good news is, it is no longer true. It is being increasingly accepted in scientific work that regular physical activity and exercises, not only bring the body to shape, but also improve a host of mental functions. Evidence is also gathering that regular physical activity and exercises also have therapeutic benefits in a number of mental disorders. They also help to prevent many common mental disorders (CMD). Scientific literature has been publishing narrative and systemic reviews, randomized control trials and meta-analysis to show significant benefits of exercises on mental health and severe mental illnesses (SMI) and CMD. The same advantage is also being reported for adventure activities.



Prof. Sudhir K Khandelwal  
Sr. Consultant  
Department of Psychiatry

Let us first understand a few terms. Exercise is a physical activity that is undertaken for weight management, to improve physical strength, stamina and endurance, and to generally stay fit. It can be an outdoor or indoor activity. Adventure is an outdoor activity that requires certain amount of physical and mental preparation, and carries an element of risk. Sports is an activity that is undertaken for relaxation, entertainment, competition, time management or glory.

In animal kingdom, animals naturally involve themselves in intense physical activity either to hunt or to avoid being hunted. In modern times, when the man is no longer a hunter-gatherer, man has to get into physical exercises as a planned activity.

Let us also understand the meaning of mental wellbeing. The concept of mental wellbeing signifies optimal health involving a delicate balance among physical, emotional, spiritual, intellectual and social health. It includes fitness, nutrition, and stress management to meditation, education, and relationships. Mental well-being makes up an integral part of an individual's capacity to lead a fulfilling life, including the ability to form relationships, study, work or pursue leisure interests, as well as to make day-to-day decisions and choices. Outdoor activity touches on all those aspects of health and can enhance not only physical health but also emotional wellbeing.

Following an episode of exercise, the body undergoes many physiological changes; these are, cardiovascular, respiratory, skeletal muscle energy metabolism, hormonal response, immune response, and central nervous system. Long term effects include adaptation in skeletal muscle and bone system, cardiovascular system, respiratory system, metabolic and immunological systems.

Some of the common mental health benefits of physical exercise include reduction in stress, anxiety and depression; improvement in mood and emotion, 'feel good phenomenon'; improving quality of sleep, enhancing self esteem, and increasing mental alertness. On the other hand, lack of physical exercise has an adverse effect on human body. This includes poor general health, poor fitness, low self esteem, poor performance, obesity, metabolic disorders, cardiovascular and pulmonary diseases, cancer, and mental disorders. Each one of these impacts an individual's quality of life, and enhance morbidity and mortality data at national level. A very obvious manifestation of low level of physical exercise at society level has been the increasing number of cases of childhood obesity.

### **Physical exercises and prevalence of depression and anxiety disorders**

Physical exercises have shown to have both, preventive as well as therapeutic benefits for mental health. Vigorous exercise participation is related to lower emotional distress. Low depression has been described in adolescents and elderly subjects undertaking physical exercises. Large cohort studies have reported that after controlling for age and sex, exercise correlated with lower depression among university students. Large samples from the United States and Canada demonstrated that self-reported level of recreational physical activity correlated with better mental

health, including fewer symptoms of both anxiety and depression. Many narrative reviews have concluded that physical activity is related to anxiety reduction following exercise. Meta-analytic studies with moderate size effect have proved exercises to be significantly related to reduction in all measures of anxiety for all types of subjects, irrespective of duration, intensity, or exercise paradigm. However, larger effects are seen with aerobic exercises done at least for 15 weeks. US National Comorbidity Survey showed significant association of regular physical activity and lower prevalence of current major depression, social phobia, specific phobia, and agoraphobia, and persisted after controlling for sociodemographic characteristics, self-reported physical disorders and comorbid mental disorders. In the case of depression exercise-induced improvements are at least equal to those observed in pharmacotherapy treatments and psychotherapeutic interventions.

What makes physical exercise based treatments so exciting is that they offer a highly effective alternative to conventional treatment methods for both anxiety and depressive disorders, and remain fully accessible to practically all individuals, with no associated financial costs, and no obvious side-effects.

## COMMUNITY HEALTH ACTIVITIES OF HOLY FAMILY COLLEGE OF NURSING

Holy Family College of Nursing, affiliated to University of Delhi.

As part of the training Community Health Department of the college along with Community Health Department of the Hospital is providing domiciliary care in the neighbourhood areas.

The services are provided to community people in underserved areas of Naibasti, Taimoor Nagar, Priyanka Camp, Aligaon and Subhash Camp. The activities carried out includes free medical checkup, screening programmes for communicable and non-communicable diseases, and mass health educational activities.

“World Breast feeding week” was celebrated from 1<sup>st</sup> August to 7<sup>th</sup> August 2016. World Heart Day celebration on September 29<sup>th</sup> included exhibition and street play.

An awareness programme with the theme of ‘Psychological First Aid’ on World Mental Health Day was celebrated in OPD of Holy Family Hospital on 10<sup>th</sup> October.

An awareness programme in General O.P.D on World Sight Day on 13<sup>th</sup> October. Students from various batches participated in “Blind Walk” at Jantar Mantar organized by Project Vision, which was held to raise awareness about the problems faced by persons with visual impairment.

The health camp was conducted to screen the patient for diabetes mellitus and cardiovascular diseases by students of community health nursing in Subhash camp for one day in the month of October, 2016. School health programme was conducted at Vidya Mandir School, Khizarabad in the Month of October. Health checkup was done for total of 120 students and 15 students were referred to Holy Family Hospital.



Anaesthesia / Pain Management	Neurology with Neurosurgery
Dental Clinic	Obstetrics and Gynaecology with Laparoscopic Surgery
Comprehensive Cardiology Service (Including Interventions)	Orthopaedics, Trauma and Joint Replacements
Dermatology	Paediatrics with IPCU & NICU
Emergency Services	Physiotherapy
Eye and ENT Surgery	Plastic and Vascular Surgery
Gastroenterology with Endoscopy	Psychiatry with Clinical Psychology
General, Laparoscopic and Paediatric Surgery	Radiology with CT and MRI
Intensive Care (ICU/IPCU/NICU)	Respiratory Medicine including Bronchoscopy
Laboratory Services	Thoracic Surgery
Medicine with ICU	Urology and Urosurgery
Nephrology and Dialysis	Alternative Medicine Including Homoeopathy & Ayurveda

## Editorial

Friends, it's heartening to share that Holy Family Hospital has another feather in its cap by starting the coronary artery bypass surgery (CABG) program. Congratulations to the cardiothoracic surgery team for this achievement. Dreams and dedication are a powerful combination - William Longgood. Our belief is to never stop dreaming, Sky is the limit.....

We welcome your valuable comments and suggestions.

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