

Newsletter Issue 12

WHO ARE WE?

M.J. Charitable Trust is working to provide education and health services to the impoverished sections of society in India.

Dr. Ashok Kumar Jainer established the trust in 2008 to fulfil his dreams of a better society for all. This Trust provides selfless and unconditional service to the mankind. Everyone working in the Trust is committed, dedicated and working unpaid, there is no admin cost. The Trust is registered and has been awarded 80G of the income tax act of India.

VISION: A world in which everyone obtains good education and health.

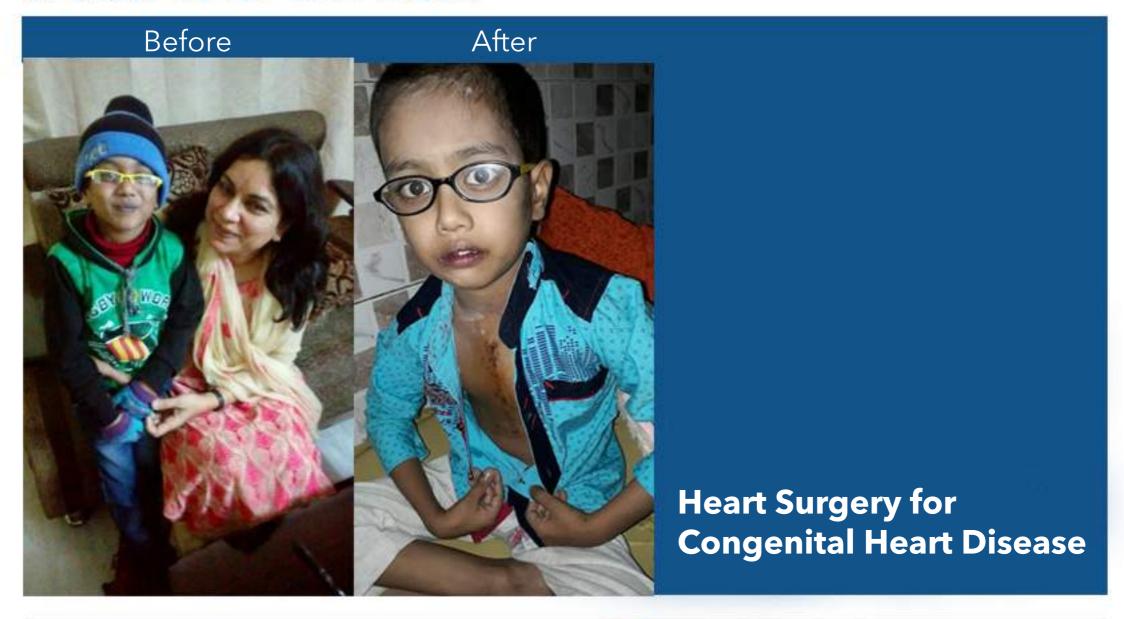
MISSION: We seek a world of hope and working to ensure that kids growing up in poverty get an excellent education and health.

VALUE: Improve well being of people and convert their suffering into self-reliance. We treat them with respect, dignity, compassion and always be responsive to their needs.

OBJECTIVES

- 1. Provide quality assured education for children growing in poverty.
- 2. Provide prompt and safe health care facilities to the poor in rural areas.
- 3. Provide food and basic amenities for people living in slums.
- 4. Raising awareness of common illness in rural part of India.

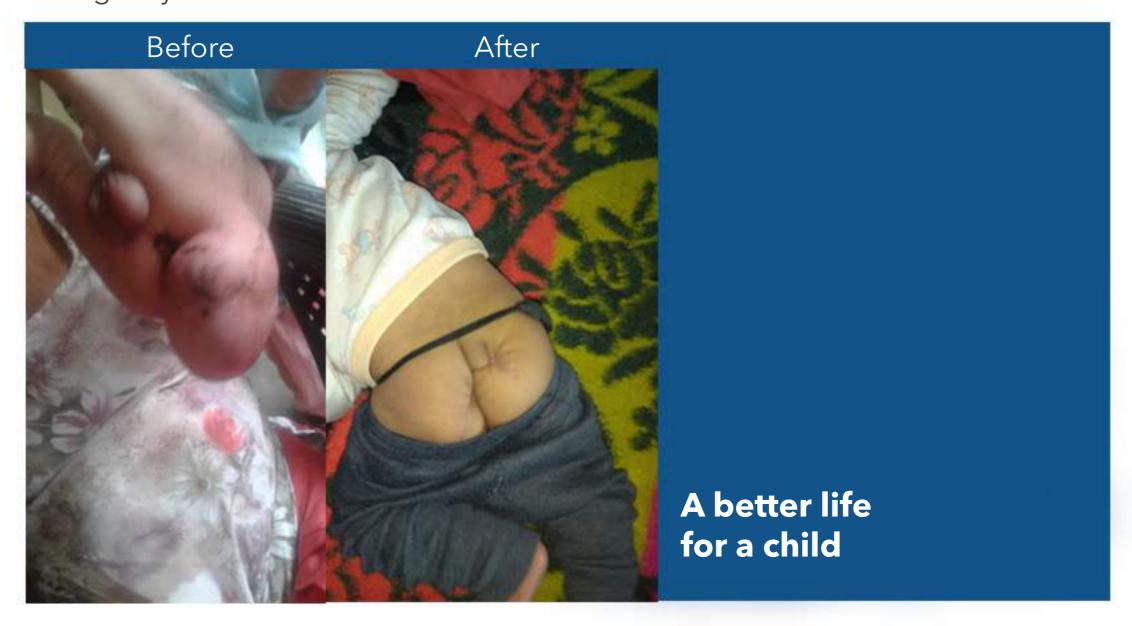
A GLIMPSE OF OUR WORK





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Single mum of a 7 year old boy with complex congenital heart disease got in touch with MJ Foundation through Facebook page and visited us on Dec'17. A review of his condition was organised by Dr. Talwar in AllMS and Prof. Banerjee cardiologist in UK and local pediatrician Hema Bisht in Indirapuram, Ghaziabad. Since then MJ foundation worked on his case. Now, this boy had a surgery and is doing very well.



This child came to our contact, and we organized operation within a week. This child has got a new life. His parents are very simple villagers. They were unable to find the right treatment for him. Somehow, they approached us on Sunday night, Monday morning he was admitted and operated soon as he required a highly specialized surgery.



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LISTEN TO OUR EXPERTS



Dr. Udaiveer Panwar MBBS, MD, DNB, FRCR, Consultant in UK on Cancer Information for General Public

What is cancer?

The growth of cells (abnormal cells) in an uncontrolled manner and developing the ability to infiltrate locally as well as spreading to other areas is cancer.

How does it develop?

Each cell has a nucleus which stores key information with specific coding within the genes. These genes are damaged and repaired on day to day basis. The repair process may involve self-destruction of abnormal cell or destruction by an active immune system. Abnormal cells that manage to escape these defenses start to grow in an uncontrolled manner and turn into cancer.

Who gets it?

1 in 2 people will develop cancer in their lifetime (UK statistics). Who gets cancer depends on a complex interplay of our genes, environmental factors, and our lifestyle. Smoking, Obesity, and Alcohol are the three most important preventable causes of cancer worldwide. Infections contribute to about 1 in 5 cancers worldwide and even higher in lower socioeconomic regions. only 2-3% of cancers are linked to faulty genes from birth e.g., BRCA gene carrier.

Can it be prevented?

Prevention is always better than cure. So far cervical screening is the only successful vaccine. Girls between the age of 12 to 13 years are offered vaccine against human papillomavirus (HPV). Work is underway to develop a vaccine against Melanoma.



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Can it be detected early?

Early detection save lives and successful screening program exists for Bowel cancer, Breast Cancer and Cervical cancer. Men over the age of 50 years can ask for PSA testing although it is not reliable enough to be used for formal prostate cancer screening. For other cancers research is continuing to identify tests that can reliably detect cancers early to save lives.

Can the risk be reduced?

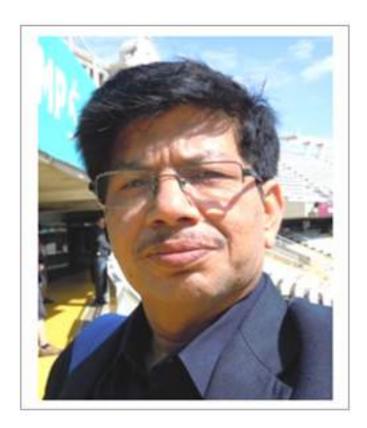
It is estimated that 4 out of 10 cancer cases could be prevented through lifestyle changes - NOT SMOKING, MAINTAINING HEALTHY BODY MASS INDEX, EATING BALANCED HEALTHY DIET, CUTTING ALCOHOL CONSUMPTION, USING SUN PROTECTION AND KEEPING ACTIVE. 1 in 10 lung cancers in the UK is caused by air pollution. The prevalence will be higher in countries with higher level of air pollution. Worldwide air quality is represented by air quality index (AQI) with a reading below 100 are considered satisfactory air quality and below 50 is considered good.

How is it treated?

Surgery, radiotherapy, and chemotherapy remain the mainstay of cancer treatment. Targeted treatment and immunotherapy is being extensively researched in recent years and becoming standard of care for certain cancer type. It is hoped that more cancers are likely to benefit from these newer treatments.

What is new about cancer?

Cancer is the highest researched field at present. A better understanding of cancer at the molecular level has sub-classified cancers to allow more individualistic treatment based on individual cancer subtype.



Prof. Manoj Jain, Department of Pathology, Sanjay Gandhi PG Institute of Medical Sciences, Lucknow on Kidney Health

If you are obese, frequent smoker, diabetic or hypertensive (raised blood pressure) or more than 50 years old, then you are at higher risk of getting Chronic Kidney Disease (CKD). Routine checkups for the kidneys ensure healthy kidneys and many early kidney diseases and their complications which leads to CKD and irreversible (permanent) kidney damage may be prevented by the timely treatment. Today in whole world hypertension, diabetes and CKD are more prevalent than infective diseases. One out of 10 adults is affected by some or other form of kidney disease.



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Diagnosis of CKD is considered when either protein (albumin) starts coming in urine or kidney (renal) function (glomerular filtration rate-GFR) is reduced (measured by serum creatinine). The diseased stage of kidney further leads to many serious diseases such as hypertension or may lead to further complications of pre-existing diseases in the body

Common Causes of CKD are swelling in the kidney (glomerulonephritis)/ nephrotic or nephritic syndrome, infections in the kidney, obstruction in the urinary tract or genetic diseases like polycystic kidney diseas

Common Symptoms of CKD are a loss of appetite, recurrent vomiting, hiccups, increased frequency of micturition (passing urine) especially at night, blood coming in urine (hematuria), painful micturition, swelling over face and decreased hemoglobin (anem

Investigations for CKD: Preliminary tests pointing towards CKD are-routine and microscopy examination of urine for the presence of more than normal range of proteins (albumin), red blood cells or leukocytes; Blood tests for the serum creatinine and hemoglobin and ultrasound abdomen. Further many tests like 24-hour urine protein estimation, serological studies, and specialized kidney biopsy may be required as suggested by the nephrologists to diagnose specific kidney disease and its severity.

Effects and Complications of Undiagnosed and Untreated Early Kidney

Disease: ase: It leads to a further decline of renal functions (GFR) and disease may progress to higher stages of CKD and later on kidney failure. Once kidney failure occurs, treatment options are very expensive and painful like lifelong kidney dialysis (hemodialysis or peritoneal dialysis) or kidney transplantation.

A person apparently looks healthy with early stages of CKD (hidden/undiagnosed kidney disease), however, he/she is at 100 times more risk for the heart and vascular diseases. The burden of CKD has further aggravated with rampant increase in the occurrence of type II diabetes mellitus in human beings

Prevention of CKD: Prevention is always better than cure. We can prevent many heart and kidney diseases by taking medications only with the advice of qualified physician apart modifying our lifestyle, modification in the dietary habits and also by precautions like control of hypertension, diabetes mellitus, control on smoking habit, obesity, diagnosing and treating anemia. With precautions like routine urine and blood investigation even without symptoms of CKD, one can prevent the risks and troublesome, expensive treatment options for kidney failure.



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Dr. J. K. Machanda, MBBS, MS Ophthalmology, Lecturer at State Medical College, Saharanpur

The optical system of the human eye includes chiefly of cornea and Lens; both of which are the transparent structure of our body. The dark circular structure in one's eye is cornea and the color that we see is due to the IRIS behind it and therefore you see different colors [of an eye] e.g. Dark Brown, Light Brown, Bluish or Greenish. Any opacity in the cornea may cause diminished vision according to its location and density; similarly ANY OPACITY IN THE HUMAN LENS SUFFICIENT ENOUGH to CAUSE DIMINISHED VISION IS KNOWN AS CATARACT [MOTIA-BIND]

Functioning of Lens

- 1. The optical function is to focus rays upon retina for a clear visual range.
- Maintaining its own transparency by actively transporting water and some solvents.
- Accommodation i.e increasing and decreasing the power of the lens, so as to see clearly at different distances.
- 4. Absorption of UV ligh.

In cataract, the optical function is partially compromised. The lens is not able to maintain its transparency due to denaturation/ precipitation of proteins and hydration. Due to compaction and hardening of lens accommodation is compromised. Lastly, UV absorption is also reduced. LENS keeps itself transparent by maintaining it in the state of Dehydration by throwing out water and sodium as active transport. Lens also synthesizes certain substance [GLUTATHIONE] which remains in reduced [Deoxygenated] state so as to fight with any oxidative stress.

Signs/ Symptoms

- 1. Most often painless progressive diminution of vision
- 2. Few will be complaining of frequent change of glasses.
- Some will come with second sight i.e. he was using glasses before to read, but now he no more needs them to read or write. This is usually a case of NUCLEAR CATARA.
- 4. Can't see better in sunlight -again in favor of Nuclear Cataract.
- Can't see better in Dim light cortical cataract which is in the peripheral part of the lens.
- Glare- pt may say that I'm not able to drive at night as I feel blind by coming vehicles headlight.



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- 7. Double vision / multiple vision patients complain that he can see many moons.
- 8. Colored halos around a light source.
- 9. Stationary black spots.
- 10. Blurring in vision.
- 11. Some white color in the center of eye/ pupillary area.

The reasons to Develop CATARACT

- 1. Risk factors
- Any break in the active transport system of lens capsules leading to hydration or increased sodium content in the lens.
- 3. Oxidative stress.
- 4. Prolonged steroid therapy.
- Uncontrolled Diabetes mellitus [specially B/sugar> 200 mg]. Exposure to Radiation of x Rays Radiotherapy.
- 5. Trauma to the lens.
- A metabolic disturbance like hypocalcemia [less calcium].
- 7. Accumulation of pigment in the nucleus.
- 8. Chemical injuries of the cornea.
- 9. Drug therapy like chlorpromazine [antipsychotic].
- 10. Certain congenital / Developmental anomalies.
- 11. Maternal malnutrition /and infection.
- 12. Premature children.

So this is quite clear, that there are so many factors which help cataract to develop and need to be avoided; but the biggest reason -Age, is so far, beyond human capacities. So by taking precaution, you can delay cataract formation and a balanced healthy diet, Reduced exposure to the above factor and dust, sun, and wind is also recommended.

What to do?

Once you come to know that you are having cataract -you must also confirm its maturity - immature, mature or hypermature. In early/ immature cataract cases an only change of glasses will help, while in case of mature & hypermature, we advise getting it operated at the earliest, lest GLAUCOMA /other complication may develop.



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.....RED FLAG SIGN

If a patient of cataract develops-

- 1. Half / a one-sided headache.
- 2. Eye pain and redness.
- 3. Nausea and vomiting.

CONTACT YOUR EYE SURGEON IMMEDIATELY

For Operation

When a person is not able to work his routine even after glasses -surgery is indicated. Only in congenital cases, we operate within 6 wk age otherwise, cataract surgery is elective ie we can plan according to the comfort of the surgeon and patient. Surgery of cataract is the most common surgery done on a human body and with the advent of newer techniques & equipment, it is quite safe.

Most common surgeries done are:-

- 1. SICS/small incision cataract surgery.
- 2. Phacoemulsification

Both these surgery are stitchless and with intraocular lens implantation [IOL]. Both have their own advantages over other technique. Roughly expenses for SICS in India is around 10K while phaco is around 35-40 k per eye but there is variation according to the surgeon, also hospital stay after surgery is few hours.

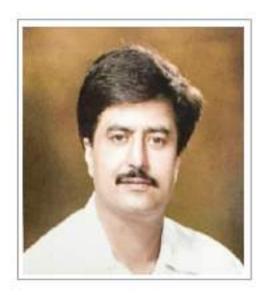


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MEDICAL CLINIC INCHARGE

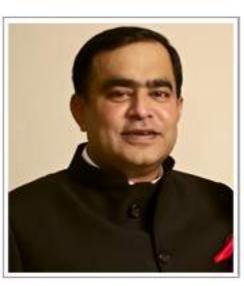


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