



From Editor's Desk

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It gives me pure joy to bring you the June 2022 issue of Seven Hills Health Byte.

This issue we are covering a rare case and management of Paraduodenal hernia from our Surgical department and how to be glass free i.e types of refractive surgeries and intra-collamer lenses which are the recent advances in the field of ophthalmology.

Get ready to enjoy the advanced laparoscopic management of Paraduodenal hernia and all the queries about how to remove spectacles and contact lenses in different types of refractive errors.

Seven Hills Hospital has treated all its patients with best of human touch in healing.

LAPAROSCOPIC MANAGEMENT OF LEFT PARADUODENAL HERNIA:

A RARE SURGICAL ENTITY AND CAUSE FOR ACUTE ABDOMINAL PAIN MANAGED SUCCESSFULLY IN SEVEN HILLS HOSPITAL, VISAKHAPATNAM

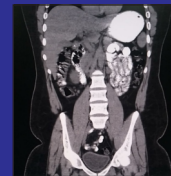
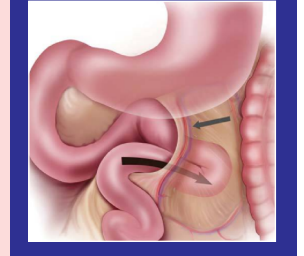
Presentation

A 16 yr old male patient presented in emergency department with complaints of acute pain in abdomen for 5 days along with vomiting. The pain had increased in intensity in the night of admission.

Patient had previous such episodes in the past too and was managed conservatively with pain killers and medication for gastric acidity. It was never properly investigated as to why patient is having recurrent pain abdomen.

Patient was investigated and an initial ultrasonography and Barium swallow was suggestive of small bowel loops present in the left side of abdomen.

A CECT abdomen revealed there was cluster of jejunal (small intestine loops) in the left anterior para renal space s/o left Paraduodenal hernia.

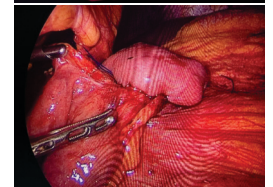
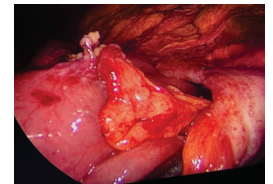


CT Scan showing left Paraduodenal hernia

SURGERY

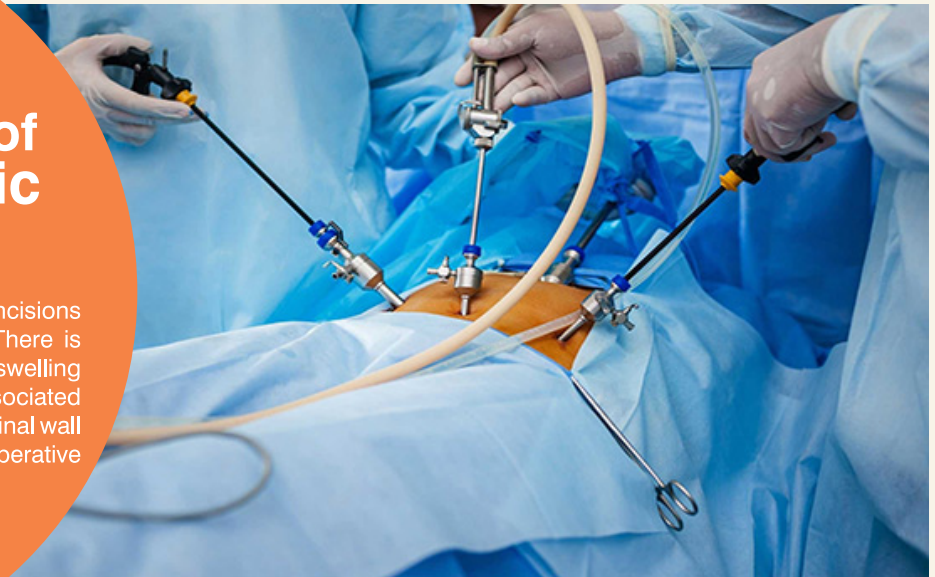
Patient underwent diagnostic laparoscopy and Laparoscopic adhesiolysis and reduction of the contents of left paraduodenal hernia along with closure of the hernia defect (repair was done). Post op period patient was managed with I/v fluids, antibiotics and other supportive care.

Patient was given liquids initially followed by soft diet. Patient pain had disappeared completely and patient had an uneventful recovery. At follow up he is doing fine.



Advantages of laparoscopic Repair

Laparoscopy gives smaller incisions and better cosmetic result. There is reduced post-operative pain, swelling and discomfort. This also associated with less trauma to the abdominal wall which decreases the post-operative morbidity and complications.



There is faster recovery and hence early restoration to work.

Reduced incidence of wound healing complications (i.e. infection and wound separation).

The ability to perform additional intra-abdominal procedures at the same time.

PARADUODENAL HERNIA

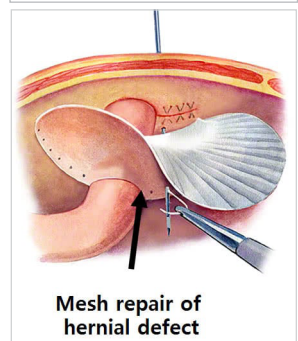
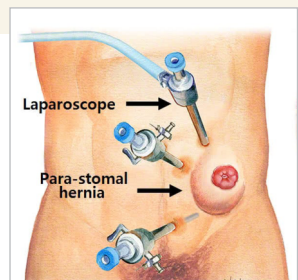
Paraduodenal hernia is a rare congenital anomaly that arises from an error of rotation of the midgut. The duodenum and the small intestine become trapped in a sac which is lined by the peritoneum, behind the mesentery of the colon, either to the right or left of the midline. It is therefore a rare and potentially life-threatening condition that can cause intestinal obstruction progressing to strangulation and perforation. It is more

common on the left side.

REASON FOR PRESENTATION

1. All abdominal pain should not be labeled due to gastric problems.
2. Recurrent abdominal pain should be thoroughly investigated as it may be due to some congenital or rare cause.
3. It is important to treat such patients in time so as to avoid catastrophic complication like bowel gangrene.
4. It is more important to recognize this condition especially in the children.

This case was managed successfully with the help of Emergency medicine specialist, Laparoscopic surgeon, Pediatrician, Radiologist and Anaesthetist, OT and Nursing staff.



Mesh repair of
hernial defect



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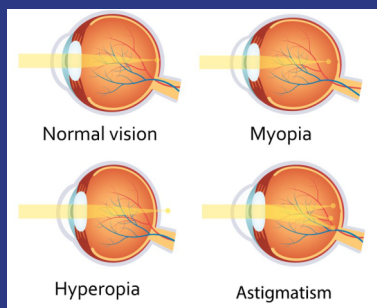
GO GLASS FREE

Recent advances in Ophthalmology has revolutionized the world. The days are gone when people were using glasses and contact lenses for their vision correction. New modalities of treatment have emerged to make them glass free.

LASER VISION CORRECTION(LVC)

INTRA COLLAMER LENSES (ICL)

Laser Vision Correction is an outpatient procedure that is capable of correcting a wide range of nearsightedness (myopia), farsightedness (hyperopia) and astigmatism. Laser vision correction has fast become the most preferred procedure for the treatment of refractive errors. The procedure is safe and the visual recovery is rapid which is why patients are undergoing this procedure the world over. Patients who cannot be treated with LVC may require ICL.



What is Refractive Error?

Normally, the rays of light entering the eye are brought to a precise focus on the retina -the light sensitive layer lining the back of the eye. When such a focus is not achieved, a refractive error results and vision is not clear. These imperfections in the focussing power of the eye are called refractive errors.

THE COMMON REFRACTIVE ERRORS ARE:

- MYOPIA OR NEARSIGHTEDNESS
- HYPEROPIA OR FARSIGHTEDNESS
- ASTIGMATISM • PRESBYOPIA



Myopia or Nearsightedness - A myopic eye is longer than normal or has a cornea that is too steep, as a result of which the light rays focus in front of the retina. Close objects look clear, but distant objects appear blurred.

Hyperopia or Farsightedness - Hyperopia is a term used to describe the condition of farsightedness. The causes of hyperopia are typically genetic and involve an eye that is too short or a cornea that is

too flat, as a result of which images focus at a point behind the Retina. People with hyperopia can usually see distant objects well, but have trouble focusing on nearby objects.

Astigmatism - Astigmatism (cylindrical error) occurs when the incoming light rays are unable to reach a common focus within the eye. Astigmatism distorts or blurs vision

for both near and far objects. Here the cornea curves more in one direction than in the other.

Presbyopia - Presbyopia is the gradual loss of your eyes' ability to focus on nearby objects. It's a natural aging process where the lens gets sclerotic. Presbyopia usually becomes noticeable in your early to mid-40s and continues to worsen until around age 65.

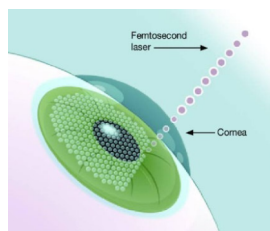
What is Laser vision correction surgery? Refractive surgery is a procedure intended to reduce a person's dependence on glasses or contact lenses by reshaping the cornea to enable light entering the eye to be properly focused onto the retina for clearer vision.

What is the type of Laser vision correction surgery available?

LASIK which stands for Laser Assisted In-Situ Keratomileusis is one of the most popular refractive surgeries available. This is because it has the quickest recovery and the least discomfort in the recovery period of all the laser eye surgery methods. In this procedure a thin hinged flap of cornea (the cornea is the transparent, dome-shaped window covering the front of the eye) is created and lifted to one side to access the

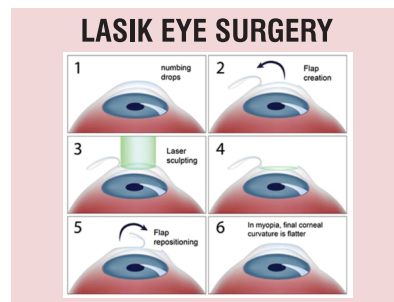
underlying cornea (called the stroma) and remove some corneal tissue using an excimer laser. The flap is then repositioned in its original position.

When the flap is created with femtosecond lasers it's called **Femto-LASIK**. It's a more advanced procedure with increased precision and customization.



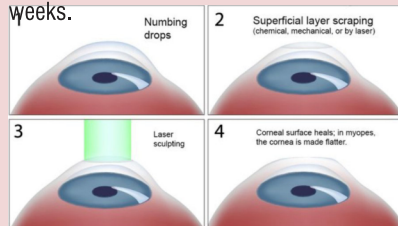
Femto - LASIK.

Wave front-guided LASIK -It is also referred to as custom LASIK or wave front LASIK, is similar to conventional LASIK, except that in addition to treating a patient's basic refractive error, specific distortion in a patient's eye (high order aberrations) can also be treated.



Photorefractive Keratectomy (PRK)

PRK which stands for Photo Refractive Keratectomy is the original laser eye surgery technique. It has now mainly been replaced by LASIK but still has a place to treat some people with thin corneas. It is also a blade-free technique. It involves gently scraping the surface layer off the cornea and then using a laser beam to re-shape it. At the end of the laser treatment a bandage contact lens is used. The exact same excimer laser used in LASIK is used for PRK. PRK recovery takes a bit longer than recovery from LASIK. Whereas LASIK recovery takes only 4- hours, PRK can take 4-5 days to settle and the final improvement occurs over 3-4 weeks.



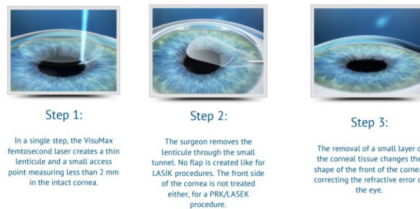
LASEK which stands for Laser Assisted Sub-Epithelial Keratomileusis is a procedure similar to PRK. Like in PRK, the corneal epithelium is separated from the underlying stromal layer. But instead of completely removing and discarding this tissue, as in PRK, the ultra-thin "flap" of epithelium is pushed off to one side of the cornea, where it remains attached to the eye (like the thicker flap of corneal tissue created during LASIK surgery). After the laser treatment is finished, the epithelial tissue is repositioned on the surface of the eye to cover the area that has had laser treatment, and a bandage contact lens is placed on the eye to keep the epithelium in place as it heals.

EPI-LASIK is another variation to the PRK procedure. The epi-lasik flap is very similar to the thin flap created in LASEK surgery using microkeratome blade. In both procedures, the flap contains only cells from the very thin outer layer of the cornea, called the epithelium. Unlike in LASEK, an alcohol solution typically is not applied to the eye in epi-LASIK to loosen epithelial cells from the underlying corneal stroma.

LBV which stands for Laser Blended Vision is a laser technique to give over 45 year olds distance and reading vision. It uses mono-

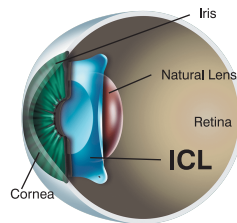
vision with the dominant eye treated for distance and the non-dominant eye treated for near.

SMILE which stands for Small Incision Lenticule Extraction, is a new technique. It is blade free and uses one laser. SMILE uses a femtosecond laser to create a lens-shaped disc of tissue within the cornea. This disc of tissue is called a 'lenticule' because it is lenticular in shape, this is removable. The lenticule size and shape is adjusted to the refractive error of the patient. The laser eye surgeon removes the lenticule through a 4-5mm incision on the cornea. The removal reshapes and flattens the cornea and therefore corrects vision.



Who are eligible candidates for corneal refractive surgery?

- Be at least 18 years of age, with a stable refraction for the past 1 year.
- Have healthy eyes that are free from any eye diseases or corneal abnormalities (Eg: scar, infection etc.)
- Should not have any connective tissue diseases (rheumatoid arthritis), auto immun (SLE and immunodeficiency diseases (AIDS).
- Should not be pregnant or a nursing mother.



What is the pre-operative requirement?

The patient should discontinue the use of contact lens at least 2 weeks prior to your Lasik consultation (As the contact lens can alter the shape of the cornea). During this period patient can wear spectacles.

What are the side effects?

- Dry eyes
- Glare, halo, double vision
- Under correction, over correction
- Astigmatism
- Regression
- Flap related complications
- Infection

What are the alternatives?

Spectacles or contact lenses are the most common methods of correcting refractive errors. The other option to correct your vision is called ICL (implantable contact Lens), When laser refractive surgery is contraindicated, ICL is a kind of lens which is implanted into the eye and does not require frequent removal like a normal contact lens.



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