LOUIS H. GLASS, M.D., F.A.C.S.
General Surgery
Diplomate American Board of Surgery
9977 North 90th Street, Suite 178
Scottsdale, Arizona 85258-4426

Telephone: (480) 947-7401

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Jacqueline Kurth Manager
Medical Resource Office
Industrial Commission of Arizona
800 W. Washington Avenue, Suite 305
Phoenix, AZ 85007-2922

Dear Ms. Kurth:

I was asked to review the ODG Chapter on Hernia. My comments follow.

Under Presumptive Diagnosis section:
It is not true that an irreducible hernia will necessarily increase in size with straining. I disagree with the sentence "In the standing position, an irreducible hernia will increase in size with straining while a strangulated one will not." Also, one cannot "examine for signs of a Richter's hernia;" it is a type of strangulated hernia that can only be diagnosed by CT scan or as in intraoperative finding. Also, it is frequently difficult to distinguish between an incarcerated and a strangulated hernia. Often, the incarcerated hernia will have been present for quite some time, whereas the strangulated hernia may have appeared recently and is associated with increased pain. However, an incarcerated hernia may cause sudden pain and conversion of an incarcerated to a strangulated hernia is difficult to rule out without prompt surgery.

The statement "imaging techniques such as MRI, CT scan, and ultrasound are unnecessary except in unusual situations" is not completely accurate. Ultrasound or CT scan may be indicated if symptoms strongly suggest a hernia which cannot be identified with certainty on physical examination, or if bowel necrosis is suggested by history or examination. This situation is most likely to occur when physical examination for hernia is suboptimal, when the patient is obese, and/or the patient is female (since transscrotal

examination is not possible), or when the hernia is strangulated. In obese patients CT scan is often preferable to ultrasound for the diagnosis of hernia.

It is unnecessary to differentiate between a suspected strangulated or Richter's hernia. Concern should only be whether the hernia is strangulated. All suspected strangulated hernias should be promptly referred to the nearest emergency department.

A truss is rarely recommended; if used improperly it may convert a reducible or incarcerated hernia into a strangulated one necessitating emergency surgery. Only a surgeon should determine whether a truss is indicated, and this is typically when surgery cannot be performed due to medical contraindications. For all types of hernias, the only definitive treatment is surgery, so surgical referral is indicated for all symptomatic (and many asymptomatic) hernias at the time they are discovered. Suspected strangulated hernias do require emergency surgery; workup is more expeditious if the patient is referred to an emergency department rather than the surgeon's office.

Under the heading **surgery** please note that of the three approaches mentioned the first approach of open repair utilizing the patient's own tissue, is typically only recommended if the patient is a youth and has not finished growing. Otherwise open tension-free mesh repair or laparoscopic mesh repairs should be utilized. There is no proven advantage of robotic-assisted laparoscopic repair for groin hernias, and this is not indicated for groin or umbilical hernia repair, likely adding substantial cost. Laparoscopic repair is not indicated for simple umbilical hernias. Though surgery can usually be performed on an outpatient basis, ventral hernia repairs may require inpatient status.

Laparoscopic repair (surgery):
The faster return to work mentioned in the paragraph may be the reason for the higher recurrence rate with laparoscopic repairs. Laparoscopic repair for recurrent inguinal hernia is only recommended if the initial repair was open (and the surgeon is experienced in laparoscopic repairs). Likewise, if the initial repair was laparoscopic, open repair is recommended for recurrence.

Office visits:
I would add that once a diagnosis of hernia has been established, a surgical referral should promptly ensue. It is pointless and potentially dangerous for a PCP or GP to

repeatedly see a patient with a diagnosed hernia and not make the appropriate surgical referral at the time of diagnosis.

Post-herniorrhaphy pain syndrome:
Ilioinguinal nerve ablation may be indicated for pain persistent more than a year. This should usually also include triple neurectomy with ablation of the iliohypogastric and genitofemoral nerves as well due to crossover of terminal nerve fibers. The success rate listed of 91% for ilioinguinal nerve neurectomies is extremely optimistic. Furthermore, most failures of triple neurectomies to provide any pain relief are in the industrial patient population.

Surgery:
Criteria for Hernia Repair:
Watchful waiting is not acceptable for femoral hernias for which repair should be promptly recommended due to the high incidence of incarceration and strangulation.

Transverse incisions:
I would strike this paragraph as transverse incisions (except for umbilical hernia repairs) burn surgical bridges if the patient ever requires another abdominal surgery and would increase risks of subsequent surgeries, particularly the risk of ventral hernia after subsequent surgery.

Truss:
A truss is not typically recommended at all as it may convert a reducible inguinal hernia to an incarcerated or strangulated one, as I explained above. The possible exception is in individuals who have medical contraindications to inguinal hernia repair.

The use of the guidelines reviewed (with caveats as noted in this letter) are likely to improve medical treatment for injured workers. The guidelines in the chapter I reviewed adequately cover the body parts and conditions.

Thank you for the opportunity to review and comment on this chapter. Please do not hesitate to contact me with questions or comments.

Sincerely,

Louis H. Glass, MD, FACS