

Nevada Compare Care



Gall Bladder Surgery

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At a Glance

Gall bladder surgery (cholecystectomy) is a common procedure with little risk of complications occurring. In 2008, there were 3,349 gall bladder surgeries in Nevada. Of that total, 3,041 were routine discharges. In the same year, only .2% of those who underwent this procedure expired (8/3349).

The average age for male patients in 2008 was 53. For female patients in the same time period, the average age was 44. The average charge for this procedure, broken down by gender, in 2008 was \$54,494.87. For female patients, the average cost was \$44,538.97.

As expected, most of the procedures (71%) were carried out in Clark County. There were two counties, Esmeralda and Lincoln, where only one cholecystectomy took place.

The Gall Bladder

The [gall bladder](#) is a sac-like organ located under the liver. Its purpose is to store bile which the liver produces to digest fat (Longstreth, 2009b). Medical experts agree that the gall bladder is an expendable organ which the body does not need. One of the most common ailments that affects the gall bladder are gallstones which can range in size from very small up to the size of a golf ball. For many people, gall stones do not cause symptoms. For those who do feel symptoms, such as pain, removing the stones via gall bladder surgery is the most likely option (MayoClinicStaff, 2009). Although pain – usually located either in the upper abdomen or near the right shoulder blade - is one of the most common signs that gallstones exist, more serious symptoms include: nausea, fever, and jaundice (yellowish color of the skin or the whites of the eyes) and should be treated immediately. Most gallstones may be

Treatment Options

For most people, gallstones do not present problems. In fact, most do not even know that they have gallstones. When symptoms do exist, there are a couple of options to choose from to remove gallstones that may not require surgery. One such treatment uses laser technology called [ESWL](#) (Extra-corporeal Shock Wave Lithotripsy) to break up large gallstones which can then be dissolved by medication or alternative herbal remedies. The ESWL procedure consists of using Intravenous Pyelogram (IVP) to locate the stone(s). Once the stones are located, the patient lies on a water-filled cushion which is submerged in a tub of water. A lithotripter is used to pulverize the stones. This device creates shock waves from high-voltage electrical output, the shock waves penetrate the soft tissue and use pin-point pressure to break up the stones. The

comprised of cholesterol, bilirubin, or a combination of both. According to the National Institutes of Health, gallstones are twice as common in women as in men. It is believed that higher levels of estrogen from pregnancy, synthetic hormones, and/or birth control pills contribute to increased levels of cholesterol. There may also be a genetic connection as it has been observed that gallstones often run in families. Weight is also a factor for increased risk of developing gallstones. Ironically, rapid weight loss can also produce gallstones (NIDDKD, 2007). Gallstones are not the only affliction that affects the gall bladder. In rare instances tumors can cause cholecystitis – inflammation of the gall bladder. Acute cholecystitis occurs when [bile](#) begins to build up. If left untreated, acute cholecystitis can cause bacterial infection and/or perforation (tearing) of the gall bladder (Longstreth, 2009a).

procedure takes about an hour and there is some amount of discomfort.

There are drugs currently on the market that can help dissolve gallstones and can be taken orally or via injection directly into the gall bladder (NIDDKD, 2007). The most common method of treating people with gallstones that cause pain is to remove the gall bladder via laparoscopic surgery. This procedure uses small incisions in the patient's abdomen to place a scope, or camera, inside the abdomen. The resulting images of the internal organs are magnified and displayed on a monitor. The surgeon uses this view to guide instruments.

After the gall bladder is detached, it is removed from the body through one of the small incisions. Recovery time after the laparoscopic procedure usually lasts about seven days. Sometimes complications arise and

the surgeon may switch from laparoscopy to open surgery. Incidents that might warrant open surgery include severe inflammation, infection, scarring from other operations, inability to accurately identify anatomy, and gallstones in the common bile duct (choledocholithiasis). Open surgery is performed on an inpatient basis, and the recovery time is of a longer duration than laparoscopic surgery (NIDDKD, 2007).

From 1994 to 2001, the percentage of conversions from laparoscopic to open procedures dropped from 11% to 1% (Bingener-Casey, 2002). In rare instances,

patients can experience post cholecystectomy syndrome. This syndrome results in a patient experiencing the same symptoms as before they underwent gall bladder surgery. These symptoms arise from the bile duct. Even without a gall bladder, it is possible for gallstones to reoccur in the duct. When this is the case, treatment can include endoscopic retrograde cholangiogram (ERC) to extract the stones if they are small enough. For larger stones, patients may undergo a laparoscopic completion cholecystectomy as well as a laparoscopic common bile duct exploration (Jain, 2008).

Nevada Inpatient – 2008

In 2008, there were 3,349 inpatient gall bladder procedures. 241(7%) of these were open surgery. 2,645(79%) of the gallbladder

procedures were referred by an emergency room physician (Figure 1.1)

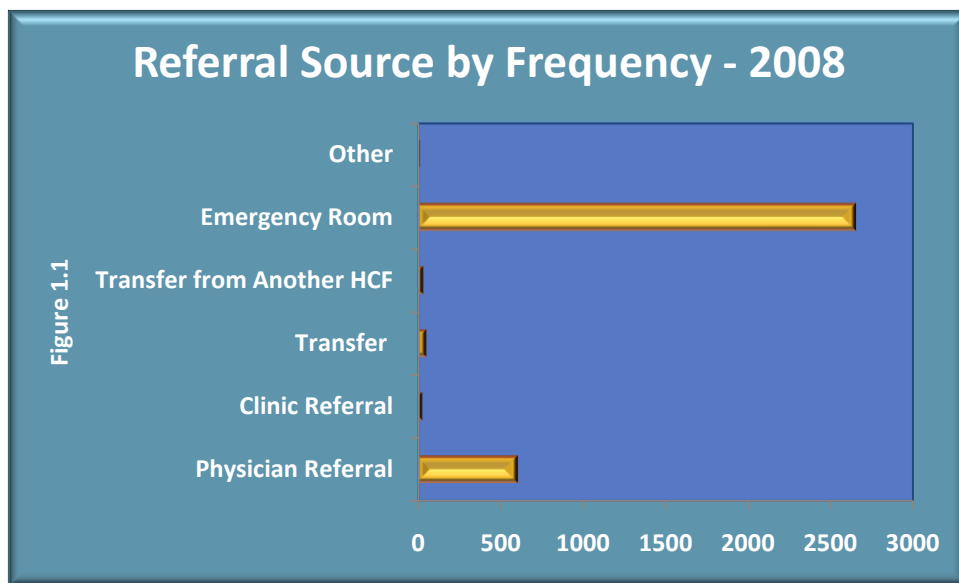


Figure 1.1

The data show that women are admitted for this procedure more frequently than men. This frequency gap can best be seen in the 18-35 age group. Gall bladder surgery for women steadily and rapidly declines with age. This is in sharp contrast to what occurs for men. The age group with the greatest frequency for men

is the 65+. It is in this age group that the frequency of males undergoing gall bladder surgery surpasses that of women. Even so, the peak age for men contains only about half the number of surgeries as the peak age for women (Figure 1.2).

Gall Bladder Surgery by Age Group and Gender

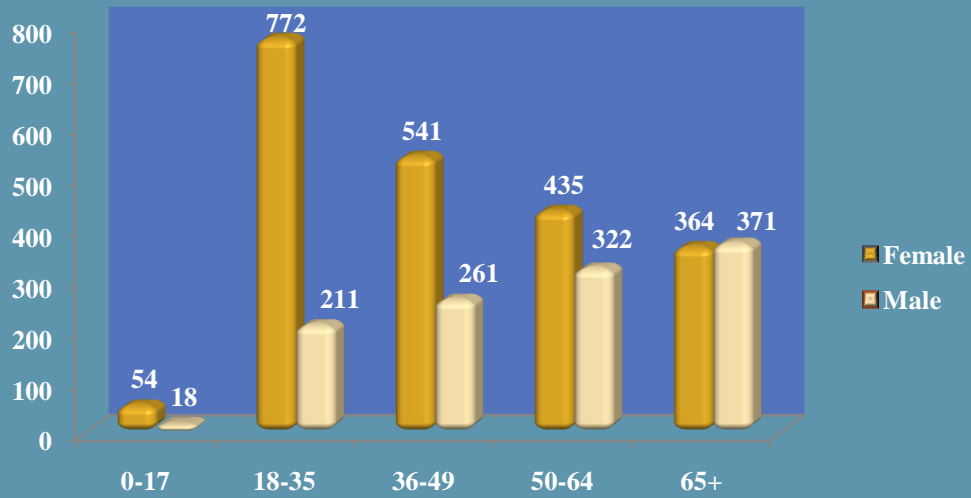


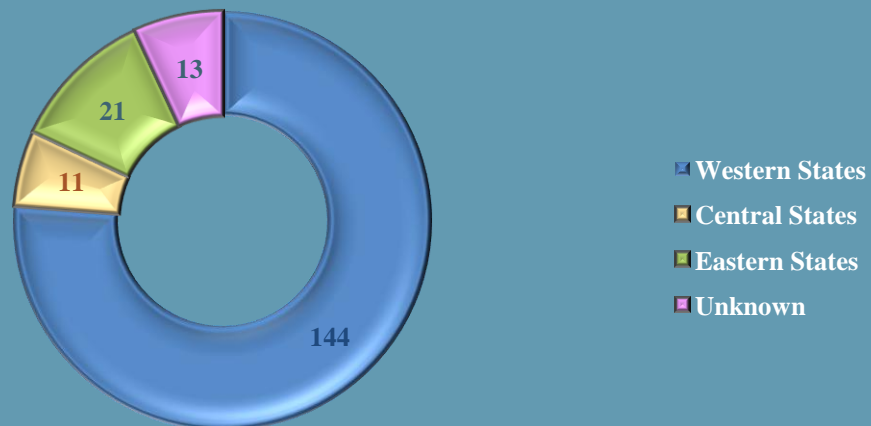
Figure 1.2

Nevada maintains a considerable population of tourists. It also has many all you can eat buffets. The consumption of large quantities of rich and fatty foods can cause a

painful gall bladder flair up. As can be seen in the figure below, many of these flair ups result in gall bladder surgery (Figure 1.3).

Gall Bladder Surgeries for Out of State Patients, by Region - 2008

Figure 1.3



Diagnosis Related Groups (DRG)

There are nine different DRG's for patients discharged in 2008 for gall bladder surgery. These range from very serious (411) to routine (419). The vast majority (n= 1,784) of gall bladder surgeries occurred under DRG 419, which is laparoscopic surgery without

complications. A patient can receive comfort from the knowledge that very few gall bladder surgeries involve much risk. The chance of mortality for an uncomplicated cholecystectomy is practically zero (Figure 1.4).

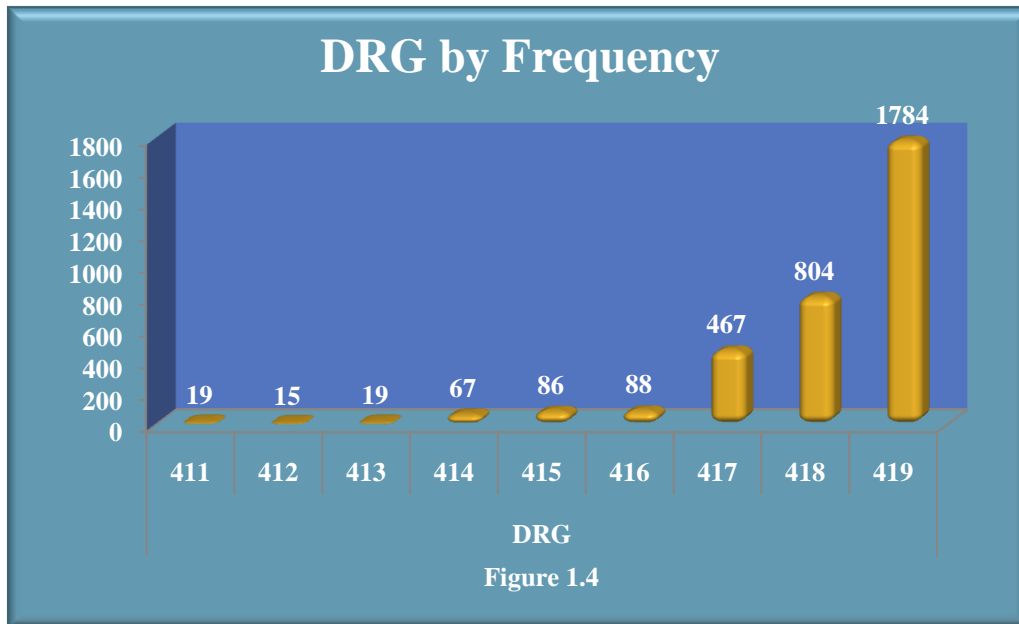


Figure 1.4

Table 1.

DRG	Definition of Diagnosis Related Groups
411	Cholecystectomy w/C.D.E.* w/major complications
412	Cholecystectomy w/C.D.E. w/complications
413	Cholecystectomy w/C.D.E. w/o complications
414	Cholecystectomy except by laparoscope w/o C.D.E. w/major complications
415	Cholecystectomy except by laparoscope w/o C.D.E. w/ complications
416	Cholecystectomy except by laparoscope w/o C.D.E. w/o complications
418	Laparoscopic cholecystectomy w/o C.D.E. w/complications
419	Laparoscopic cholecystectomy w/o C.D.E. w/o complications

*Common Duct Exploration

Post-Surgery Discharge Status – 2008

In 2008, 1,043 male patients, who underwent gall bladder surgery, received a routine discharge to home or self-care. 1,998 female patients were also discharged under this category. A very small number of patients

were discharged to a Hospice Medical Facility, (n=4), and eight patients expired in the hospital. While there are never any guarantees for the outcome on any medical procedure, a 91% (3041/3349) rate for routine discharge is quite good.



Conclusion

Gall bladder surgery is a very common procedure. Almost all patients that undergo this surgery have few, to no complications. There are a variety of reasons why a person needs their gall bladder removed. For some, the accumulation of excessive bilirubin and

cholesterol creates gall stones that can be painful. For others, the gall bladder doesn't function as it should. Some researchers believe that there might be a link between levels of estrogen and the presence of gallstones which would explain why there is a disproportionately higher number of women who need their gall bladders removed than men. Women typically undergo the procedure at a younger age than men, which supports the estrogen link. This disparity decreases with age and has essentially disappeared by age 65+.

While many patients will have their gall bladders removed via laparoscopy, there are some instances when it is necessary for the surgeon to perform what is called an Open Procedure. This form of surgery is more extensive than laparoscopy, and the recovery period is longer.

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