INTRODUCTION

The Gallbladder
Physiologically, the role of the gallbladder is to store and concentrate bile, which is continuously produced by the liver and necessary for the absorption of fats and fat-soluble vitamins. The gallbladder itself is a nonessential organ, and enterohepatic circulation (the circulation of biliary acids) should continue at a functionally appropriate level post cholecystectomy.

Cholecystectomy
Cholecystectomy is the surgical removal of the gallbladder, and is often the treatment choice for chronic symptomatic gallstones and/or cholecystitis (inflamed gallbladder).

OBJECTIVES

1. Track long-term changes in lipid profiles and fat soluble vitamins in patients post-cholecystectomy.
2. Collect data on the long-term risk of developing cardiovascular disease post-cholecystectomy.
3. Compare with case controlled non-cholecystectomy subjects in the Framingham offspring cohort.

METHODS

1. A retrospective analysis of the Framingham Heart Study Offspring Database from 1971 to the present.
2. Using ICD-9 coding, locate participants within the Framingham offspring cohort that had either gallbladder disease, cholecystectomy, or gallbladder disease and cholecystectomy.
3. Review the charts corresponding to the participants within the study that coded only for gallbladder disease.
4. Verify if and when a cholecystectomy was performed.
5. From all charts pulled in step 1, excluding those that did not have cholecystectomy as verified in step 3, collect data points:
   a. Date of cholecystectomy
   b. Procedure (laparoscopic or open)
   c. Incision site
   d. Post-operative complication, both short-term and long-term
   d. Subsequent abdominal surgery (type, date)

FUTURE GOALS

1. 280 charts have been reviewed, and our next step is to continue on the data collecting for the offspring cohort (total of 643)
2. Once the offspring cohort is complete, we will analyze the data looking at the following measures:
   a. Cardiovascular profile 1 - Lipid panel
      • Total cholesterol
      • HDL
      • LDL
      • Triglycerides
      • ApoB
      • Lipoprotein(a)

REFERENCES

Murphy, MM., Ng, SC., Simons, JP., Csikesz, NG., Shah, SA., Tseng JF. (2010). Predictors of Major Complications after Laparoscopic Cholecystectomy: Surgeon, Hospital, or Patient? Journal of American College of Surgeons, 211(1), 73-80


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