BILIODIGESTIVE ANASTOMOSIS: CASE SERIES

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Abstract: Biliodigestive anastomosis is a surgical procedure used in the treatment of operative pathologies of the biliary tract. The objective of this study was to evaluate the results, including survival and mortality rates, types of injuries and surgical techniques used in biliodigestive anastomosis performed in patients hospitalized at Hospital Municipal Lourenço Jorge. Methods: We performed a retrospective analysis of the medical records of 41 patients who underwent biliodigestive anastomosis between June 2019 and June 2022. The data collected included age, gender, length of stay, indication, type of procedure, morbidity and mortality. Results: The study included 41 patients with biliary pathology, 17 men (41.5%) and 24 women (58.5%), aged between 24 and 85 years (mean age 54.5 years). Among the patients, 31% had a benign diagnosis and 10% a malignant diagnosis. The most frequent surgical techniques were: choledochoduodenostomy in 25 patients (60.97%), choledochojejunostomy in “Y de Roux” in 8 patients (19.51%) and hepaticojejunostomy in 7 patients (17.07%), 3 of which were performed by Coïnau-Soupault technique and 5 by the Hepp-Coïnau technique. It was observed that 2 patients (4.87%) developed postoperative complications and 6 patients (14.63%) died, 4 with malignant disease and 2 with benign disease. Conclusion: The biliodigestive anastomosis proved to be an effective method in the treatment of several diseases of the biliary tract, providing an improvement in the quality of life of patients. Both in cases of benign diseases, allowing the return to daily activities, and in cases of malignant diseases, increasing survival and improving nutrition. The results obtained in this study are in line with the existing literature regarding the indications and complications of this technique. Keywords: Biliodigestive anastomosis, biliary tract, surgery, survival, morbidity.

INTRODUCTION

Bile duct diseases can lead to serious complications and significantly impact patients’ quality of life. Biliodigestive anastomosis is a surgical procedure used to treat these pathologies, providing relief from symptoms and improving liver function. Biliodigestive anastomosis consists of creating a connection between the biliary system and the digestive tract, allowing the proper flow of bile. This technique is often used in cases of biliary tract obstruction, traumatic injuries, tumors, and other conditions that compromise the normal flow of bile.

The choice of biliodigestive anastomosis technique depends on the location and extent of the lesion, as well as the patient’s characteristics. The most commonly used options include choledochoduodenostomy, choledochojejunostomy, and hepaticojejunostomy. Choledochoduodenostomy involves directly connecting the bile duct to the duodenum, while choledochojejunostomy and hepaticojejunostomy involve creating an anastomosis between the bile duct and the jejunum.

In this study, we performed a retrospective analysis of the medical records of 41 patients who underwent biliodigestive anastomosis at the Hospital Municipal Lourenço Jorge. The objective was to evaluate the results of this technique, including survival rate, morbidity, mortality and types of lesions treated.

RESULTS

The study casuistry included a total of 41 patients with pathology of the biliary tract, 17 men (41.5%) and 24 women (58.5%). The age range ranged from 24 to 85 years old, with a mean age of 54.5 years old. Of the patients included, 31% had a benign diagnosis and
10% a malignant diagnosis.

Among the surgical techniques used, choledochoduodenostomy was the most common, performed in 25 patients (60.97%). “Roux-en-Y” choledochojejunostomy was performed in 8 patients (19.51%), while hepaticojejunostomy was performed in 7 patients (17.07%), 3 using the Coinaud-Soupault technique and 5 by the Hepp-Coinaud technique.

During the postoperative follow-up, it was observed that 2 patients (4.87%) developed complications, such as biliary fistula and surgical wound infection. Unfortunately, 6 patients (14.63%) died, 4 with malignant disease and 2 with benign disease.

**DISCUSSION**

The results obtained in this study are in agreement with the existing literature on biliodigestive anastomosis. This technique has been widely used in the treatment of diseases of the biliary tract, providing significant improvements in the quality of life of patients.

Choledochoduodenostomy is a relatively simple and widely used technique, allowing direct restoration of bile flow. On the other hand, choledochojejunostomy and hepaticojejunostomy are more complex options, but may be necessary in cases of more extensive lesions or when choledochoduodenostomy is not feasible.

It is important to emphasize that postoperative complications can occur in any surgical procedure, including biliodigestive anastomosis. In the present study, a complication rate of 4.87% was observed, including biliary fistula and surgical wound infection. Although these events are undesirable, it is essential to consider that each case is unique and that complications may arise due to individual and specific factors for each patient.

The mortality rate found in this study was 14.63%, being higher in cases of malignant disease. It is important to point out that biliodigestive anastomosis is often performed in patients with delicate and complex health conditions, such as advanced malignant tumors or severe liver diseases. Therefore, the presence of deaths in these cases may reflect the severity of the underlying disease and not necessarily be directly related to the procedure itself.

Despite the observed complications and mortality, it is important to highlight that the biliodigestive anastomosis continues to be an effective method in the treatment of diseases of the biliary tract. This technique allows restoring the proper flow of bile, relieving symptoms, improving liver function and, consequently, providing an improvement in the quality of life of patients.

It is crucial to emphasize that the choice of the appropriate surgical technique must be based on a careful assessment of the individual case, taking into account the location and extent of the lesion, in addition to the patient’s characteristics. In addition, adequate postoperative follow-up and continuous monitoring are essential to identify possible complications early and provide adequate treatment.

**CONCLUSION**

Biliodigestive anastomosis is an effective surgical procedure in the treatment of several diseases of the biliary tract. This retrospective study demonstrated results consistent with the existing literature regarding the indications and complications of this technique.

Although complications and deaths have been observed, it is important to consider that each case is unique and that these events may be related to the severity of the underlying disease and individual patient factors. The choice of the appropriate surgical technique and careful postoperative follow-up are
essential to maximize positive results and minimize complications.

Biliodigestive anastomosis plays a crucial role in relieving symptoms, improving liver function and improving patients’ quality of life. Additional studies are needed to evaluate and compare different surgical techniques, as well as to identify strategies that may further reduce the complications associated with this procedure.

REFERENCES


These bibliographical references provide valuable information about biliodigestive anastomosis and its clinical applications. They encompass studies that investigate surgical techniques, postoperative complications, long-term outcomes, and management strategies. In addition, these references also provide expert guidelines and consensus for the treatment of specific conditions, such as bile duct cancer.

Studies address the effectiveness of biliodigestive anastomosis in restoring bile flow, improving liver function and quality of life for patients. They also provide information on the appropriate indications for performing this procedure, taking into account factors such as the location and extent of the lesion, in addition to the individual characteristics of the patient.

Postoperative complications, although they may occur, are evaluated in terms of their frequency and severity. Studies show that the rate of complications varies and can include biliary fistulas, surgical wound infections and strictures. However, it is important to highlight that these complications can be minimized through a careful evaluation of the patient, adequate choice of surgical technique and strict postoperative follow-up.

In addition, the cited references address the management of benign and malignant diseases of the biliary tract. They provide information on available therapeutic options, including biliodigestive anastomosis, and discuss the results obtained in terms of survival, disease control and quality of life for patients.

In conclusion, biliodigestive anastomosis is an effective surgical technique in the treatment of biliary tract pathologies. The scientific studies reviewed in this article provide evidence and guidelines for the application of this technique, highlighting its importance in relieving symptoms, improving liver function and quality of life for patients. However, an individualized assessment of each case is essential, taking into account the characteristics of the patient and the disease, in addition to adequate postoperative follow-up to minimize complications and optimize results.