**Management of Bile Acid Malabsorption: Insights into Treatment and Patient Outcomes**

**Introduction:** Bile acid malabsorption (BAM) arises from dysregulation of enterohepatic bile acid recycling and production, often manifesting as chronic, debilitating diarrhoea. Current first-line treatment involves bile acid sequestrants (eg.cholestyramine, colesevelam). However, response rates and tolerance to these treatments have been inconsistent. This study aims to evaluate the management outcomes in our patients diagnosed with BAM over a five-year period.

**Methods:** A retrospective analysis was conducted on 353 patients who underwent SeHCAT testing for suspected BAM from January 2019 for a five-year period. Clinical data, including treatment regimens, response and ancillary investigations, were extracted from medical records and analysed.

**Results:** Of the 353 patients reviewed, 175 (49.57%) were diagnosed with BAM, with over 90% presenting with chronic diarrhoea. Of these, using NICE guidelines, 47(26.86%) had mild, 63(36%) had moderate and 65(37.14%) had severe BAM. The main referrals for SeHCAT came from Gastroenterologists (76.44%); the remaining 41 patients were largely picked up by Colorectal surgeons with an interest in lower GI physiology, other referring specialties included other colorectal surgeons, general medicine, care of the elderly, respiratory medicine and even urology. Among these, 105 patients were prescribed cholestyramine; however, 47 of these were excluded from further analysis due to lack of follow-up data. Of the 58 evaluable patients, 55% demonstrated symptom improvement, while many experienced side effects such as headaches and abdominal discomfort, leading to poor adherence. For patient’s intolerant to cholestyramine, 34 were transitioned to colesevelam, with 50% reporting symptom relief. Among responders, 47% showed significant symptom control. Notably, 60% of all BAM-diagnosed patients were not followed up by specialty care and were discharged prematurely. Interestingly, co-prescribing antidiarrhoeals with bile acid sequestrants yielded a 100% response rate with no adverse effects reported.

**Discussion:** Our findings highlight critical gaps in the management of BAM. Poor compliance with cholestyramine, primarily due to side effects, underscores the importance of individualized treatment plans and patient education. Furthermore, inadequate follow-up care likely contributed to suboptimal treatment outcomes. Severe BAM, as indicated by SeHCAT scores, correlated with poorer treatment responses, suggesting the need for alternative therapeutic strategies. Co-prescribing antidiarrhoeals alongside sequestrants showed promising efficacy and tolerability, potentially reducing the need for higher doses of sequestrants and their associated side effects. These findings call for improved follow-up protocols, patient-centered approaches to medication management, and further exploration of combination therapies to enhance outcomes in BAM management.