

A 65-YEAR OLD MALE WITH HILAR CHOLANGIOCARCINOMA

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BACKGROUND

A 65-year-old male was admitted with symptoms of obstructive jaundice which was later diagnosed as hilar cholangiocarcinoma (cancer of the bile duct). He underwent a percutaneous transhepatic cholangiogram (PTC) and biliary drainage. This helped to relieve his jaundice, but his high biliary losses (>1L per day) put him at risk of electrolyte imbalance and fat malabsorption. Bile reinfusion was therefore advised and after discussion and instructions on how to do this, he managed to drink some of his bile after each of his meals (reinfusing approximately 500mls in total per day).

The patient's baseline weight was 94.4kg and his BMI was 28.2kg/m². He had unintentionally lost 9.2% of his body weight over the previous 1-2 months prior to the trial. Reasons for weight loss included suppressed appetite, nausea, frequent fasting prior to procedures, as well as likely malabsorption. NG feeding with a 1.33kcal/ml peptide based feed was initially trialled alongside bile reinfusion but he complained of bloating and biliary reflux. NJ feeding was better tolerated but when this tube accidentally came out after only a couple of days, the patient refused having another tube placed as he did not like having a tube in his nose. At this time however, his tolerance of oral intake was improving and he was now managing 3 small meals per day. This meant that we could aim towards meeting his nutritional requirements orally with the addition of oral nutritional supplements. Prior to the patient recruiting onto the trial, he was commenced on Fortijuice; each 200ml bottle providing 300kcal, 7.8g Protein, but nil fat which was significant given his high biliary losses.

At the time of recruitment to the trial, the patient was an inpatient awaiting further investigations to help determine his surgical pathway.

RATIONALE AND USE OF PEPTISIP ENERGY HP

The goal was to optimise the patient's nutritional intake and ensure he could digest and absorb this nutrition adequately, in order to prevent further nutritional losses. Whilst bile reinfusion helped him eat more freely and optimise his fat digestion, he still had significant biliary losses (approximately 500mls per day which was not reinfused). Although he tolerated Fortijuice with no issues, it was felt worthwhile swapping to Peptisip Energy HP which contains

almost double the protein content of Fortijuice (15g versus 7.8g). Although it is not fat free, 60% of the fat is in the form of MCTs which do not require bile salts for their absorption. Additionally, Peptisip Energy HP is nutritionally complete in vitamins and minerals compared to Fortijuice which is not. The patient was initially prescribed 1x 200ml of Peptisip Energy HP to be taken orally (providing 300kcal/day and 15g protein/day).

RESULTS

Over the 28 day trial period, the patient increased his intake of Peptisip Energy HP from 1 bottle (200ml) to 3 bottles (600ml) per day, as he tolerated it very well. He also found it mixed well with and improved the palatability of his bile which he needed to drink. Overall, the patient's tolerance and compliance to Peptisip Energy HP was reported as excellent.

The table below shows how his nutritional intake improved over the trial period and how Peptisip Energy HP helped him to meet his energy and protein requirements.

	Requirement	Baseline intake	Endpoint intake
Energy (kcal/day)	2290	1473	2337 (38.5% energy from Peptisip Energy HP)
Protein (g/day)	95-114	52	116 (38.7% protein from Peptisip Energy HP)

SUMMARY

The patient presented with significant weight loss and was at risk of further nutritional losses in view of his suboptimal intake and high biliary losses. Optimising the patient's nutritional intake with Peptisip Energy HP, alongside bile reinfusion, helped to stabilise his weight. He tolerated Peptisip Energy HP very well and stated that he preferred it to other oral nutritional supplements he had tried previously.