**An 83-year-old resident of a skilled nursing facility presents to the emergency department with generalized edema of extremities and abdomen. History obtained from staff reveals the patient has history of malabsorption syndrome and difficulty eating due to lack of dentures. The patient has been diagnosed with protein malnutrition.**

The nutrition we put in our bodies is paramount to our ability to function on a daily basis. Cells need macro and micronutrients to sustain life. An 83-year-old patient who presents with edema from malabsorption of nutrients due to the lack of dentures should simply have a soft diet until the patient is properly fit with dentures, or until another suitable option is found. Malabsorption syndrome has many causes, both genetic and not; though, genetics plays a role in every disease and how it manifests in the body. When not enough protein is circulating in the bloodstream for the body to utilize, the cells in the body cannot function properly and eventually malnutrition occurs (Keller, 2014; Zuvarox & Belletieri, 2022). In short, the cells and rest of the body, including the organs will not get the nutrients needed to thrive, or even survive.

McCance (2018) explains that it is important for fat, starch, and protein to pass through the intestines to complete cellular growth and regeneration. Otherwise, the process of catabolism does not take place as it should. In cellular metabolism, there are two processes: anabolism and catabolism. Catabolism happens when the body breaks down complex molecules into simple ones for the purpose of transferring energy to the cell to produce more cells and alter cell structures. In the third and final phase of catabolism, after intracellular breakdown of nutrients, waste products are excreted (McCance, et al., 2018). For this 83-year-old patient, that process is not occurring as it should, so edema builds up instead of excreting waste through urine and stool.

This patient may have a family history of diseases or disorders that would cause malabsorption syndrome, such as autoimmune disorders, gastrointestinal disorders, or Whipple’s disease (Patnayak, et al., 2016). However, with the information that the patient has not been eating because of the lack of dentures, it is highly likely that this is the route cause. There may still be a genetic link as to why this patient has malabsorption syndrome, but the medical staff would need to inquire further with family and follow up with more diagnostic tests if they wanted to know if there was any genetic link in this case.

When patients experience malabsorption, other symptoms may arise, such as neurological changes (Patnayak, et al., 2016). Neurological changes in an 83-year-old patient may not be taken as seriously as if they were occurring in a younger individual, which could further delay care. A proper diet and semi-frequent labs are more than adequate to manage elderly nutrition. The Mini-Nutritional Assessment (MNA) is a quick and reliable test to assess nutrition in elderly patients, but early diagnosis and treatment is crucial (Nagaratnam, 2019). Understanding patients’ history is also important, as well as managing their everyday dietary intake.

In “Maldigestion versus malabsorption in the elderly,” Schiller (2020) discusses the difference between maldigestion/malabsorption verses malnourishment in older adults. He offers suggestions that it may not be lack of or poor food intake that results in malabsorption. Rather, poor diet combined with other underlying illnesses. He found that elderly individuals with malabsorption had previous surgeries, or were taking medicines that blocked nutrient absorption, or had underlying illnesses or diseases (Schiller).

Zuvarox and Belletieri (2022) differentiates between malabsorption and maldigestion stating malabsorption is, “impaired nutrient absorption at any point where nutrients are absorbed… [whereas,] maldigestion refers to impaired nutrient digestion within the intestinal lumen or at the brush border” (para. 3). These authors argue that malabsorption is rarely from malnutrition and almost always occurs when there is a disfunction with the small intestines. The patient in this case had edema in the extremities and abdomen, so malabsorption is a possibility since those are side effects when waste is not excreted. However, the edema may have been due to other causes, as well. In short, a diagnosis of malabsorption may be premature, but starting with this diagnosis and exploring further into other options makes sense with what is known at this time. Rehydrating and nourishing the patient is paramount, as the cells need the building blocks of fats, starches, and proteins to survive and thrive.

References

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