Hyperkalemia Management in the Oncology Patient: A Case of Sodium-Polystyrene-Sulfate Induced Bowel Perforation

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Sodium polystyrene sulfate (SPS) is a cation-exchange resin commonly used to treat hyperkalemia in patients with renal dysfunction. It works by exchanging its bound sodium with potassium in the colon to promote potassium excretion in the stool. This occurs over hours to days, and is known to cause adverse digestive effects including anorexia, nausea, vomiting, and constipation. Bowel necrosis and perforation is an uncommonly recognized, though devastating complication of SPS administration.

We present a case of a postoperative surgical oncology patient who developed a bowel perforation associated with oral SPS administration. We also review the literature to further delineate the relationship between the use of SPS and bowel perforation and necrosis, particularly in a surgical oncology patient where this complication has been less frequently documented.