

The rash pictured, along with symptoms of weight loss, diarrhea, anemia, and diabetes, should lead to investigation with:



ANSWER: Serum glucagon level

The rash and presentation are consistent with necrolytic migratory erythema, which develops with glucagon-secreting tumors of the pancreas. Diagnosis is best made by measuring serum glucagon levels, with levels of greater than 1000pg/mL being diagnostic. Zinc deficiency can cause Acrodermatitis enteropathica, which is a similar skin rash. Fasting C-peptide levels may be useful in diagnosing an insulinoma. There is no role for endoscopy or small bowel examination in the initial diagnosis of a glucagonoma.