A 60-year-old man presented to Endocrinology outpatients clinic with blackish discoloration of hands and feet, axilla, groin and face for 2 months and was referred to Gastroenterology for evaluation epigastric discomfort of 6-month duration. He also reported anorexia and 19-kg weight loss over last 6-month period. He denied having gastrointestinal bleeding or jaundice. Examination revealed mild pallor, grade III clubbing and a small left supraclavicular lymph node. He had hyperpigmented, velvety, hyperkeratotic lesions involving face, nape of neck, palms, dorsum of hands, feet, axillae, and both groins (Figure 1 A-C). Abdominal examination revealed a 5 X 6 cm firm epigastric lump. There was no jaundice, pedal edema, hypotension, hepatosplenomegaly, ascites and succussion splash. External genitalia and digital rectal examination revealed no abnormality. Routine haemogram and serum chemistry were normal. Esophagogastro-duodenoscopy revealed ulcerated lesion in the distal stomach causing narrowing of the lumen (Figure 1 D) through which endoscope could not be passed. Endoscopic biopsy showed signet ring adenocarcinoma of the stomach (Fig. 1 E). Multiple biopsies from proximal stomach failed to show intestinal metaplasia or Helicobacter pylori. A CT scan of abdomen revealed thickening of gastric antrum with extension to duodenum causing partial occlusion of the lumen (Fig. 1 F). Fine needle aspiration cytology from left supraclavicular lymph node revealed metastatic adenocarcinoma. In view of advanced malignancy the patient was discharged with symptomatic treatment.

Though acanthosis nigricans is uncommon in internal malignancies, this may sometime precede manifestations of the primary tumor; however, this cutaneous sign almost always denotes internal malignancy, commonest in the stomach (1) It has been suggested that transforming growth factor (TGF) alpha released by the primary tumor act as an endocrine-like mechanism causing epidermal keratinocytes to proliferate (2). This is further evidenced by reports of regression of acanthosis nigricans after resection or chemotherapy for primary tumor (2-3) which also resulted in reduction of serum TGF level (2). Recognition of this sign and extensive investigations for internal malignancy may help in early diagnosis of internal malignancy and its appropriate management.

References