A 57-year-old man without any symptoms or signs of illness underwent upper-GI endoscopy for a routine health evaluation. Esophagoscopy revealed a small hiatal hernia and multiple 0.5-mm to 5-mm diameter yellow-whitish granular nodules scattered throughout the middle and lower esophagus, resembling xanthomata (A). These lesions stained slightly with Lugol iodine solution, and enhanced-magnification endoscopy with narrow-band image system revealed that they were encircled by slightly stretched microvessels (B). When autofluorescence image system was used, the intervening esophageal mucosa was green, whereas the granular lesions were pink or violet (C). To obtain sufficient tissue for a histopathologic diagnosis, we performed EMR with a ligating device (EMRL). We successfully resected the lesion without any complications. His clinical course after EMRL was uneventful and he was discharged. Histology revealed the lesions to be esophageal ectopic sebaceous glands without hair follicle (D, H&E, orig. mag. ×20). The glands consisted of units of large polyhedral cells with clear vacuolated cytoplasm, accompanied by an excretory duct.