

IMAGE DIAGNOSIS ASSISTANCE APPARATUS, DATA COLLECTION METHOD,
IMAGE DIAGNOSIS ASSISTANCE METHOD, AND IMAGE DIAGNOSIS
ASSISTANCE PROGRAM

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ABSTRACT

Provided are: an image diagnosis assistance apparatus capable of assisting diagnosis of an endoscopic image captured by an endoscopist; a data collection method; an image diagnosis assistance method; and an image diagnosis assistance program. The image diagnosis assistance apparatus is provided with: a lesion assessment unit that assesses, by a convolutional neural network, the denomination and the position of a lesion which is present in a digestive system endoscopic image of a patient captured by a digestive system endoscopic imaging device and information about accuracies thereof; and a display control unit that performs control for generating an analysis result image in which the denomination and the position of the lesion and the accuracies thereof are displayed and for displaying the image on the digestive system endoscopic image. In the convolutional neural network, learning processing is performed on the basis of the denominations and the positions of the lesions that are present in a plurality of digestive system tumor endoscopic images predetermined by feature extraction of conditions of atrophy, intestinal metaplasia, swelling or depression of a mucous membrane, and mucous membrane color tone.

[Fig. 1]