

Fine Structure of the Small Intestinal Mucosa in Infantile Marasmic Malnutrition

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The jejunal mucosa was studied in infantile marasmic malnutrition in the early phase after treatment was begun and before the onset of significant weight gain. In 7 infants light microscopy before recovery showed that the mucosa was normal or mildly abnormal in 4, and moderately abnormal in 3 cases. The electron microscope disclosed abnormalities of the brush border, large autophagosomes and residual bodies, and the deposition of collagen, filaments, and a dense, finely granular material below the basal lamella. Three of the infants were studied again during recovery. Although the histology remained unchanged, electron microscopy revealed improvement of the brush border, disappearance of the autophagosomes, and smaller and fewer residual bodies. The dense material below the basal lamella was absent whereas the fibrillar components remained. It is postulated that the fine structural lesions observed may be due to the derangements in cell metabolism caused by the severe, prolonged restri