foam, and using triamcinolone (0.5%) three times a day. Silver nitrate may also be used for hypergranulation.



FIG 20-21 Appearance of healthy granulation tissue around a stoma.

For children receiving long-term gastrostomy feeding, a **skin**level device (e.g., MIC-KEY, Bard Button) offers several advantages. The small, flexible silicone device protrudes slightly from the abdomen, is cosmetically pleasing, affords increased comfort and mobility to the child, is easy to care for, and is fully immersible in water. The one-way valve at the proximal end minimizes reflux and eliminates the need for clamping. However, the skin-level device requires a well-established gastrostomy site and is more expensive than the conventional tube. In addition, the valve may become clogged. When functioning, the valve prevents air from escaping; therefore, the child may require frequent bubbling. With some devices, during feedings, the child must remain fairly still, because the tubing easily disconnects from the opening if the child moves. With other devices, extension tubing can be securely attached to the opening (Fig. 20-22). The feeding is instilled at the other end of the tubing in a manner similar to that for a regular gastrostomy. The extension tubing may also have a separate medication port. Both the feeding and the medication ports have plugs attached. Some skin-level devices require a special tube to be able to decompress the stomach (to check residual or decompress air).