

# Dermatology Digest

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**FIGURE 1**  
Mass in the  
antecubital area



## Should this patient be more concerned about her cyst?

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### ›CASE

An asymptomatic lesion had grown slowly on a 50-year-old woman's arm over the past 5 years. Eventually, the patient's husband insisted that she seek medical evaluation from her primary care provider who, in turn, referred her to dermatology. Further history-taking revealed that she had first noticed a tiny papule within a few weeks of having donated blood, which had necessitated a large-caliber needlestick at that site. She denied ever having had a similar lesion elsewhere on her body and claimed to be in generally good health. However, the patient had a history of a great deal of poorly tolerated sun exposure as a young woman.

Examination revealed a 3-cm, oval, shallow subcutaneous mass covering most of the lateral aspect of her right antecubital area (Figure 1). The surface of the mass was smooth and rounded to a height of about 2 cm, with a highly symmetrical shape and well-defined borders. No overlying punctum was noted, and no change in color from the surrounding skin was seen.

The lesion was uniformly soft and fluctuant on palpation, and it did not appear to interfere with flexion or extension. Results of a cursory neurologic examination of the patient's arm and hand were within normal limits, with no sign of muscle atrophy in either.

### ›THE MOST LIKELY DIAGNOSIS IS

- *Lipoma*
- *Liposarcoma*
- *Ganglion cyst*
- *Epidermal inclusion cyst*

### ›DISCUSSION

The correct diagnosis is epidermal inclusion cyst (EIC). The cyst was most likely caused by implantation of epidermal elements by the large-caliber needle used to harvest the patient's blood. Lipomas are benign tumors of adipose origin and often appear in such locations, but lipomas have a firmer, more rubbery feel than cysts. Malignancies, such as liposarcoma, are rightly considered but unlikely given the history of such slow growth, the soft consistency noted on palpation, and the symmetrical shape. Ganglion cysts are quite unusual in this area because they arise from shallow tendon sheaths that are more commonly encountered in the relatively thin skin of the wrist. Ganglion cysts are also much firmer on palpation than other types of cysts.

**Comment** True EICs are almost certainly of follicular infundibulum (hair-shaft tissue) origin because they have the same cellular composition. Trauma of any kind, including puncture wounds, can result in implantation of these cells in the dermis, most commonly on the extremities, especially the hands. The cells eventuate in sacs with an organized wall and cheesy, often odoriferous, contents.

EIC is a relatively unusual type of cyst that is generically known as an *epidermoid cyst*. These cysts originate from a proliferation of epidermal cells in a circumscribed space in the dermis and are extremely prevalent. Heredity, human papillomavirus, and UV exposure are possible triggers. Malignant transformation is possible; therefore, surgically removed cysts should be evaluated by pathology, as was eventually done in this case. **JAAPA**