17. Quiz: What is your diagnosis?

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Histopathologic findings
What is your diagnosis?

**Answer**

Erythema toxicum neonatorum

**Comment**

The photomicrographs are of section of tissue cut from a biopsy specimen that came from a 3-day-old. Clinically, the newborn had a pustular eruption on the buttocks. The clinical differential diagnosis included an infection by herpesvirus on one hand and erythema toxicum neonatorum on the other. Histopathologic findings were those of erythema toxicum neonatorum.

The histopathologic differential diagnosis of erythema toxicum neonatorum is incontinentia pigmenti at the vesicular stage of that eruption in neonates. Unlike incontinentia pigmenti, erythema toxicum neonatorum is a pustular process that affects infundibular epidermis rather than a spongiosic process that involves surface epidermis. In this particular example of erythema toxicum neonatorum, there was some degree of involvement of the surface by collections of neutrophils, in contrast with the conventional example, which is restricted to the infundibulum.
In contrast with incontinentia pigmenti, erythema toxicum neonatorum, also called toxic erythema of the newborn, presents itself as scattered papules and pustules that appear during the first few days of life. The eruption can be widespread and it resolves in a few days.

The clinical differential diagnosis of erythema toxicum neonatorum includes miliaria rubra, incontinentia pigmenti, and transient neonatal pustular melanosis. Miliaria rubra differs from erythema toxicum neonatorum in that spongiosis and a sparse superficial perivascular and interstitial infiltrate of neutrophils in conjunction with lymphocytes in loci in the dermal infiltrate are present. Incontinentia pigmenti differs in that there are large collections of eosinophils in spongiotic vesicles, in contrast with collections of eosinophils in discrete loci of the epidermis, and transient neonatal pustular melanosis differs in that there are eosinophils and neutrophils sprinkled in infundibula and in surface epidermis in company with slight spongiosis.

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