

# An Atlas of Lumps and Bumps: Part 12

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## Bohn Nodule

A Bohn nodule is characterized by a firm, whitish lesion on the buccal and, less commonly, the lingual aspect of the maxillary or the mandibular alveolar ridge (**Figures 1 and 2**).<sup>1-3</sup> The lesion has a rice-like appearance and can be solitary or multiple. Once thought of as a mucous gland cyst, recent studies suggest that it is either a keratin cyst derived from remnants of odontogenic epithelium over the dental lamina or remnants of minor salivary glands.<sup>2,3</sup> The condition is asymptomatic and does not interfere with feeding.<sup>1</sup> The nodules are named after Heinrich Bohn, a German pediatrician who first described them in 1866. A Bohn nodule is often mistaken by parents as a natal or erupting tooth.<sup>4</sup> Other differential diagnoses include Epstein pearl, congenital epulis, pyogenic granuloma, and dental lamina cyst (gingival cyst). Bohn

nodules occur more frequently in full-term vs preterm infants.<sup>5,6</sup> In one study, folic acid consumption during pregnancy was significantly associated with Bohn nodules (odds ratio: 1.79; 95% CI: 1.23-2.55).<sup>5</sup> The lesions are self-limiting and usually disappear by age 3 months.

## Epstein Pearls

Clinically, Epstein pearls present as pearly white or whitish-yellow papules on the roof of the mouth (**Figure 3**). The condition was first described by Alois Epstein, a Prague pediatrician, in 1880 and now bears his name.<sup>7,8</sup> Presumably, Epstein pearls are caused by epithelium trapped between the palatal shelves during palatal fusion.<sup>8</sup> Some authors suggest that Epstein pearls may result from remnants of the minor salivary glands of the palate.<sup>8</sup> Histologically, Epstein pearls are keratin-containing cysts

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Dr Leung is the series editor. He was not involved with the handling of this paper, which was sent out for independent external peer review.

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## EDITOR'S NOTE:

This article is part of a series describing and differentiating dermatologic lumps and bumps. To access previously published articles in the series, visit <https://bit.ly/35J11iv>.



Figure 1.



Figure 2.

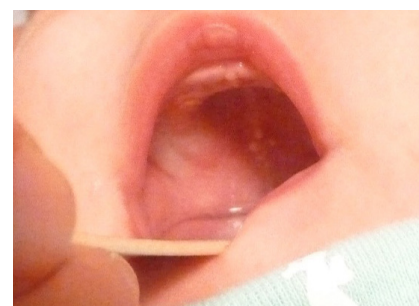


Figure 3.

lined by stratified squamous epithelium.<sup>8</sup> Epstein pearls are seen in 60% to 90% of neonates.<sup>9-12</sup> The condition is more common in individuals with Japanese race, followed by White and Black race.<sup>11</sup> The sex ratio is approximately equal.<sup>7</sup> Epstein



Figure 4.



Figure 5.

pearls are more prevalent in infants born to multigravida mothers.<sup>7,9</sup> Data correlating the length of gestation and prevalence of Epstein pearls are conflicting.<sup>5,9,13</sup>

Typically, Epstein pearls are seen in the mid-palatal raphe at the junction of the hard and soft palate.<sup>7,11</sup> In infants with cleft palate, the lesions are located at the margins of the palatal shelves.<sup>7,11</sup> Lesions can be solitary or, more commonly, multiple and tend to cluster. The lesion varies from 1 to 3 mm in diameter. The size of the lesion usually does not progress over time.<sup>7</sup> On palpation, larger lesions can be appreciated when the infant is sucking on the examiner's finger. Epstein pearls are asymptomatic and do not cause problems with feeding.

Similar to Bohn nodules, Epstein pearls usually resolve spontaneously by age 3 months.<sup>11</sup> As such, treatment is not necessary.

### Neonatal Sucking Pads of the Lips

Sucking pads can develop on the lips in the postnatal period as a result of sucking on a nipple or pacifier.<sup>14</sup> The pads are hyperkeratotic lesions and usually occur



Figure 6.

in the central portion of the lips (Figures 4-6).<sup>15</sup> Sucking pads are caused by the combined intracellular edema and epithelial hyperplasia.<sup>15,16</sup> They often persist for a few weeks to months and are of no medical significance.

Neonatal sucking pads should be distinguished from neonatal sucking blisters, which result from vigorous sucking by the infant during fetal life.<sup>16,17</sup> Neonatal sucking blisters are always present at birth and are mainly located on the distal upper extremities.<sup>16,17</sup> The lesions of neonatal sucking blisters usually resolve in days to weeks without treatment.<sup>18</sup>

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