Dear Editor,

A 15-year-old boy presented with an enlarged mass on his intergluteal cleft. The mass started to develop 2 months ago and had a slow-growing nature. It was located on the right upper border of his intergluteal cleft area and exhibited elastic consistency, with local inflammatory symptoms of tenderness, redness, and warmth sensation. His medical record only indicated atopic dermatitis, with no relevant family history, recent trauma, or any recent accidental fall. His thyroid function was normal.

On examination, a nonpruritic indurated nodule with an indistinct erythematous border was observed on the coccygeal area (Figure 1A). Tenderness was reported on palpation, with no fluctuation or purulent discharge. The lesion was problematic, because it interfered with the patient's daily activities, particularly when sitting in an upright position. Lumbosacral X-ray imaging revealed normal vertebral alignment and coccyx angulation. Given the findings, our initial tentative diagnosis was coccygeal pad. Skin biopsy was performed, and the histopathological examination result was increased fibroblasts in the dermis and subcutis with abundant mucin deposition (Figure 2). Subsequently, coccygeal pad with cutaneous mucinosis was diagnosed.

Coccygeal pad (also known as coccygeal nodule, isolated collagenoma, tylosis-like eruption, and tylosis-like nodule) was first described in a Japanese article by Ohta et al.1 in 1985. This condition often presents as an acquired nodule on the sacrococcygeal area and is frequently related to bicycle riding.2 As a result of its rarity and clinical similarity, the lesion is often confused with epidermal inclusion cysts, carbuncles, lipomas, or skin-appendage tumors. Limited reports of coccygeal pad have been published in the English-language dermatological literature; the first such article published in 1995 by Nakamura et al.2 reported an acquired coccygeal nodule. Mirusawa et al. first coined the term coccygeal pad in 1993.3 However, the etiology and pathogenesis of coccygeal pad remains unresolved. A review of 42 patients in Japanese- and English-language articles by Hashimoto et al. proposed that chronic stimulation by the coccyx may be a possible cause of the disease. Their study showed that anterior dislocation of the coccyx was found in 79.5% of cases with coccygeal pad; however, this was not observed in our patient.

By contrast, cutaneous mucinosis comprises a broad spectrum of diseases, in which excessive mucin accumulates in the dermis and epithelium of the skin.4 Focal cutaneous mucinosis is generally regarded as a reactive process, due to dysfunctional fibroblasts in the local area.5 The exact pathogenesis that triggers excess mucin production remains undefined. Several reports have suggested that focal mucinosis arises from mechanical stimulation, such as lip biting, intralesional steroid injection, or repeated friction.6 Our patient did not ride a bicycle for long periods but often spent several hours sitting on a chair in school and in front of a computer in a relaxed position. We hypothesize that long-term friction could induce cutaneous mucinosis within the coccygeal pad.

In conclusion, our case demonstrates de novo occurrence of cutaneous mucinosis and coccygeal pad on the sacrococcygeal area; possibly a reactive process caused by chronic stimulation such as bicycle riding and pressure in the sitting position. To the best of our knowledge, this is the first published article in the English language on coccygeal pad coexisting with cutaneous mucinosis. No recurrence 1 year after surgical excision was observed. As a result of its rarity, diagnosis is not easy, and it may therefore be under-reported. Further studies are warranted to understand the pathophysiology and significance of the disease.

Figure 1 An erythematous indurated nodule, approximately 3 cm × 4 cm, located on the right upper border of the intergluteal cleft.

Conflicts of interest: None.
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References

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Figure 2 (A) A biopsy specimen showing hyperkeratosis and acanthosis with an amorphous pinkish dermis [H&E (hematoxylin and eosin); original magnification, 20×]. (B) There were separated collagen fibers in the dermis. (H&E; original magnification, 200×). (C) Abundant mucin deposition in the dermis and subcutis (alcian blue, 200×).