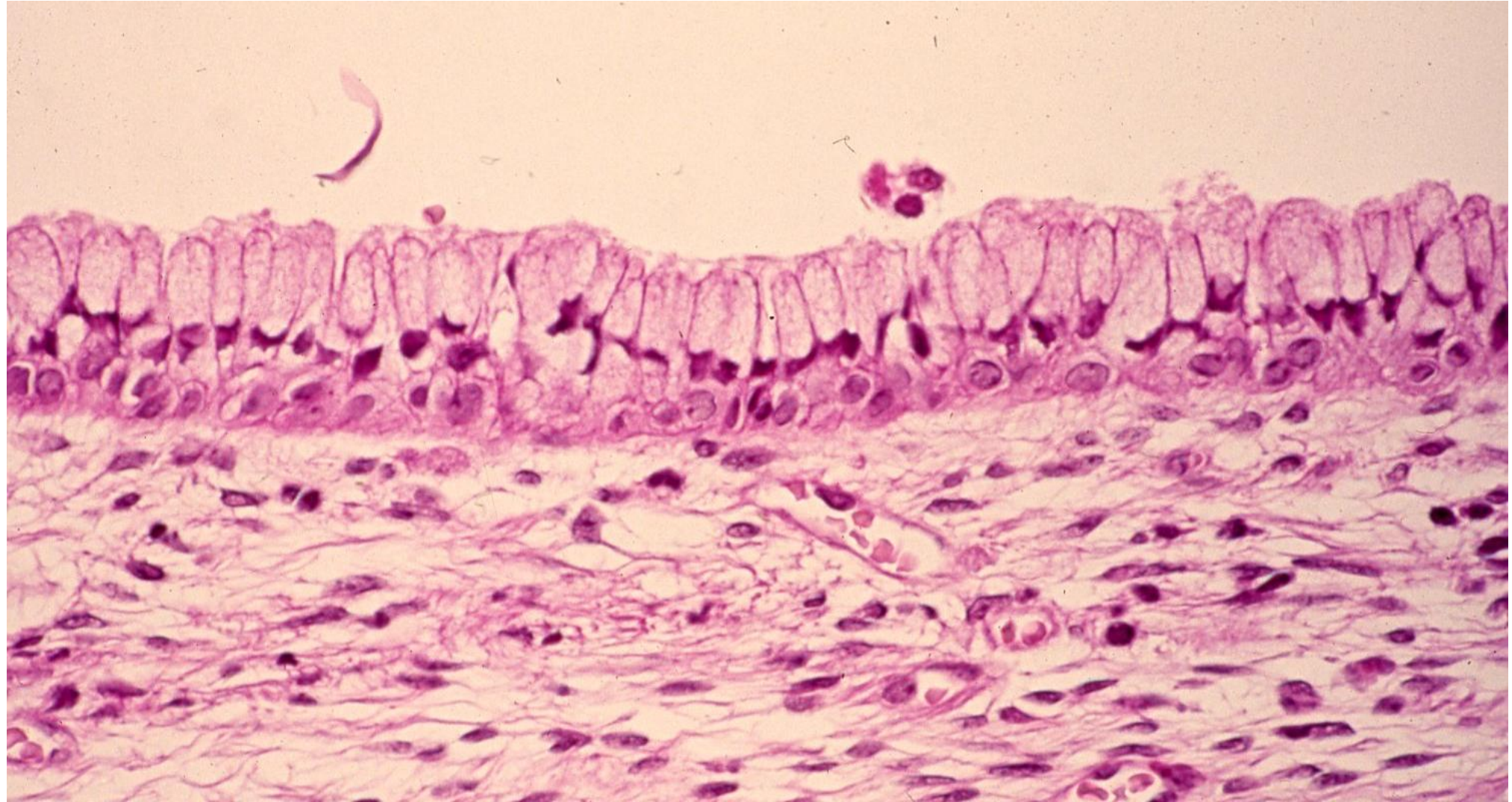


Reserve cell hyperplasia

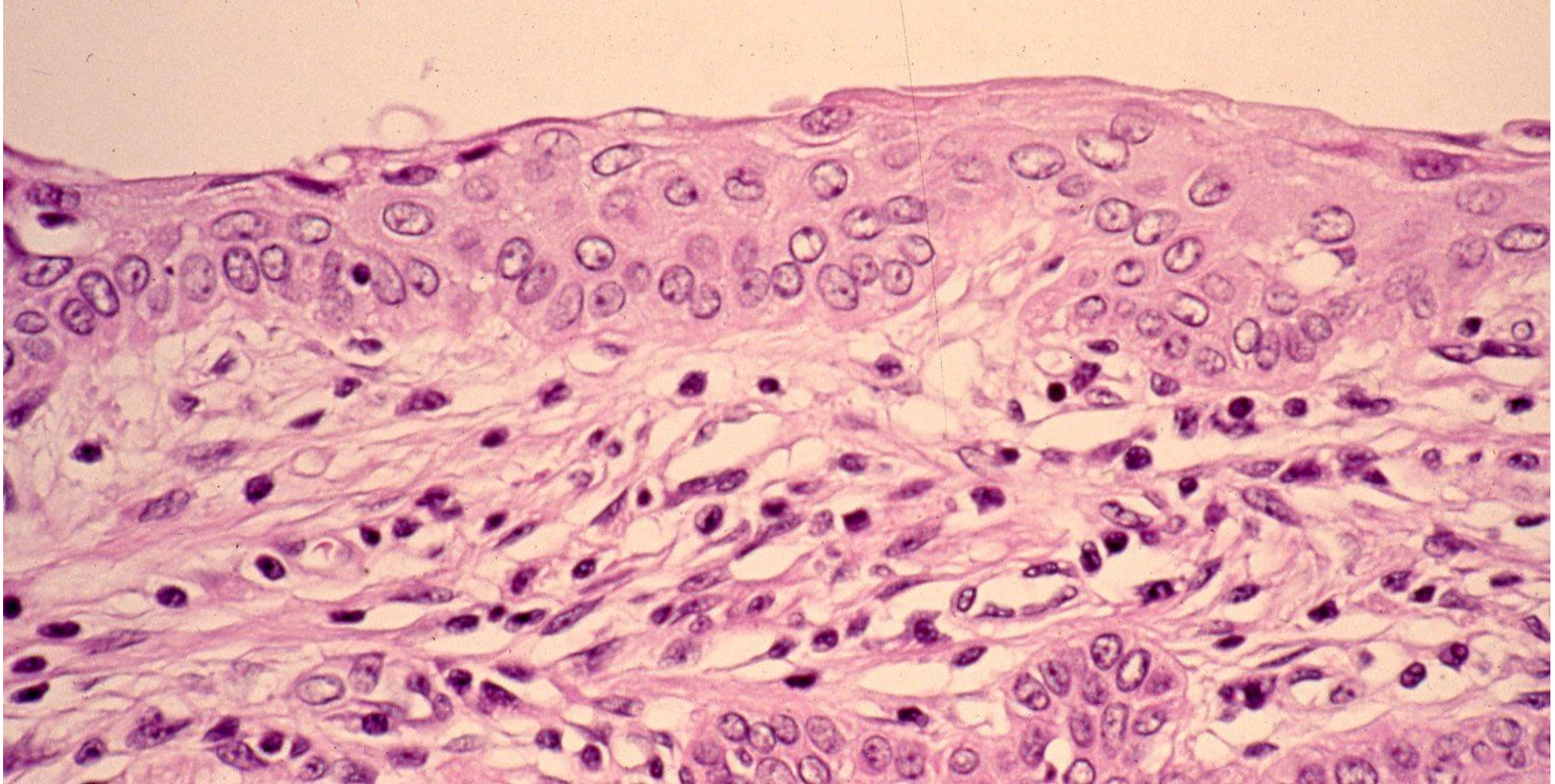
Reserve cells represent subcolumnar cells of the normal endocervical mucosa that may proliferate and differentiate into squamous cells (squamous metaplasia) or glandular cells. The proliferation of reserve cells gives the reserve cell hyperplasia pattern, easy to recognize in histology. In cytological preparations, groups or isolated naked nuclei are seen, with regular but sometimes densified chromatin. Cytologically, reserve cell hyperplasia is indiscernible from immature metaplasia. When these elements are enlarged and more irregular in chromatin texture, ASC-H should be reported. Reserve cell hyperplasia has also been called as basal cell hyperplasia and prickle cell hyperplasia. So-called immature squamous metaplasia, composed of polygonal cells with scant cytoplasm, may represent an active reserve cell hyperplasia. p16 immunostaining is consistently negative.

Ref.-1: Friedell GH. Premalignant lesions of the cervix: pathology. Clin Obstet Gynecol 1962; 5: 1127-1136. doi: 10.1097/00003081-196212000-00017

Ref.-2: Yoshiki M. Squamous metaplasia. PathologyOutlines.com website. 2025.
<https://www.pathologyoutlines.com/topic/cervixmetaplasiasquamous.html>



Endocervical mucosa with reserve cells at the base of a female case aged 30's (H&E-1). The mucosa has a two-celled pattern: reserve cells and mucous columnar cells.



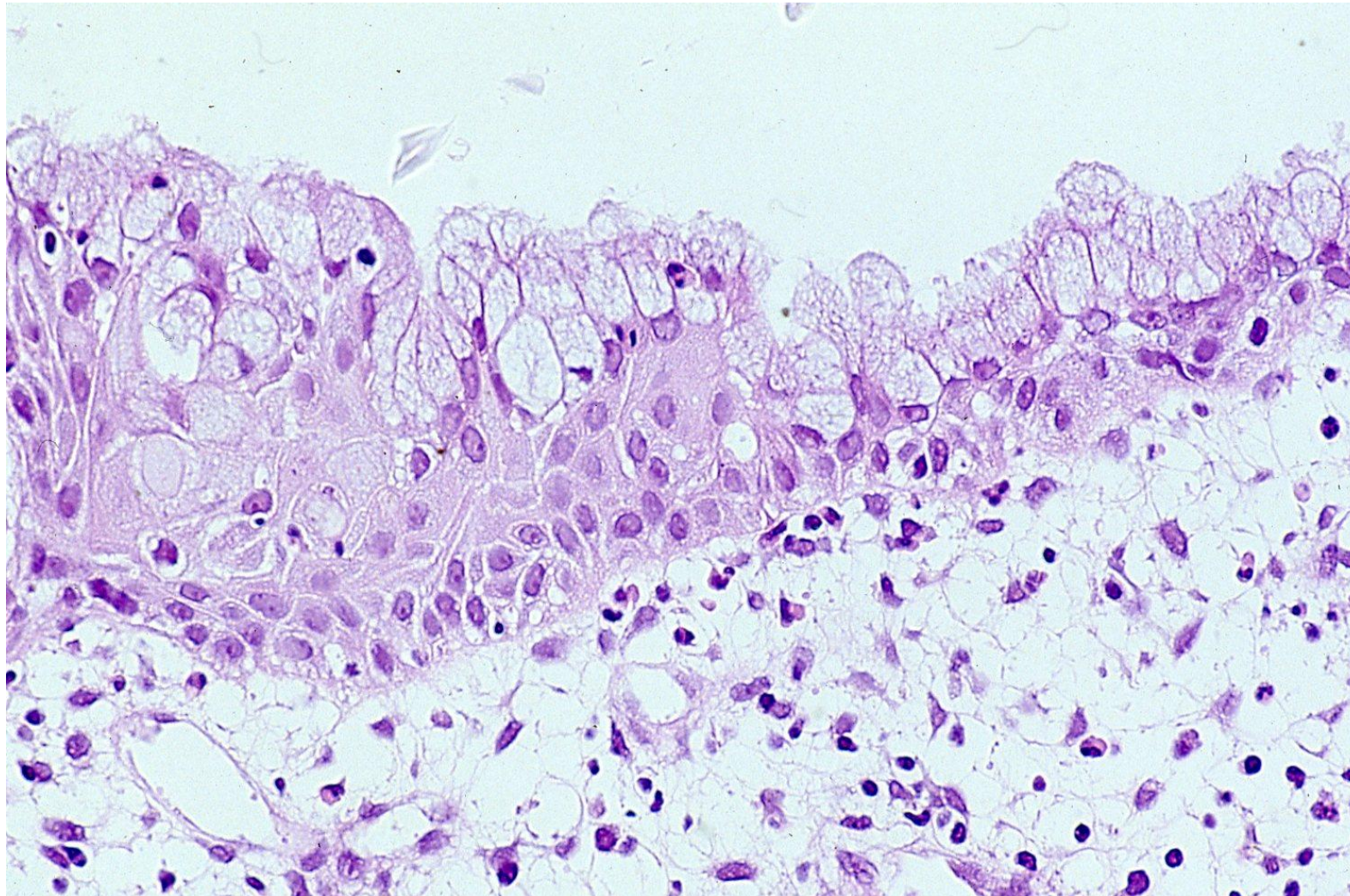
Reserve cell hyperplasia in the endocervical mucosa seen in a female case aged 30's (H&E-2). The reserve cell layer is thickened, and squamous differentiation can be observed on the surface.



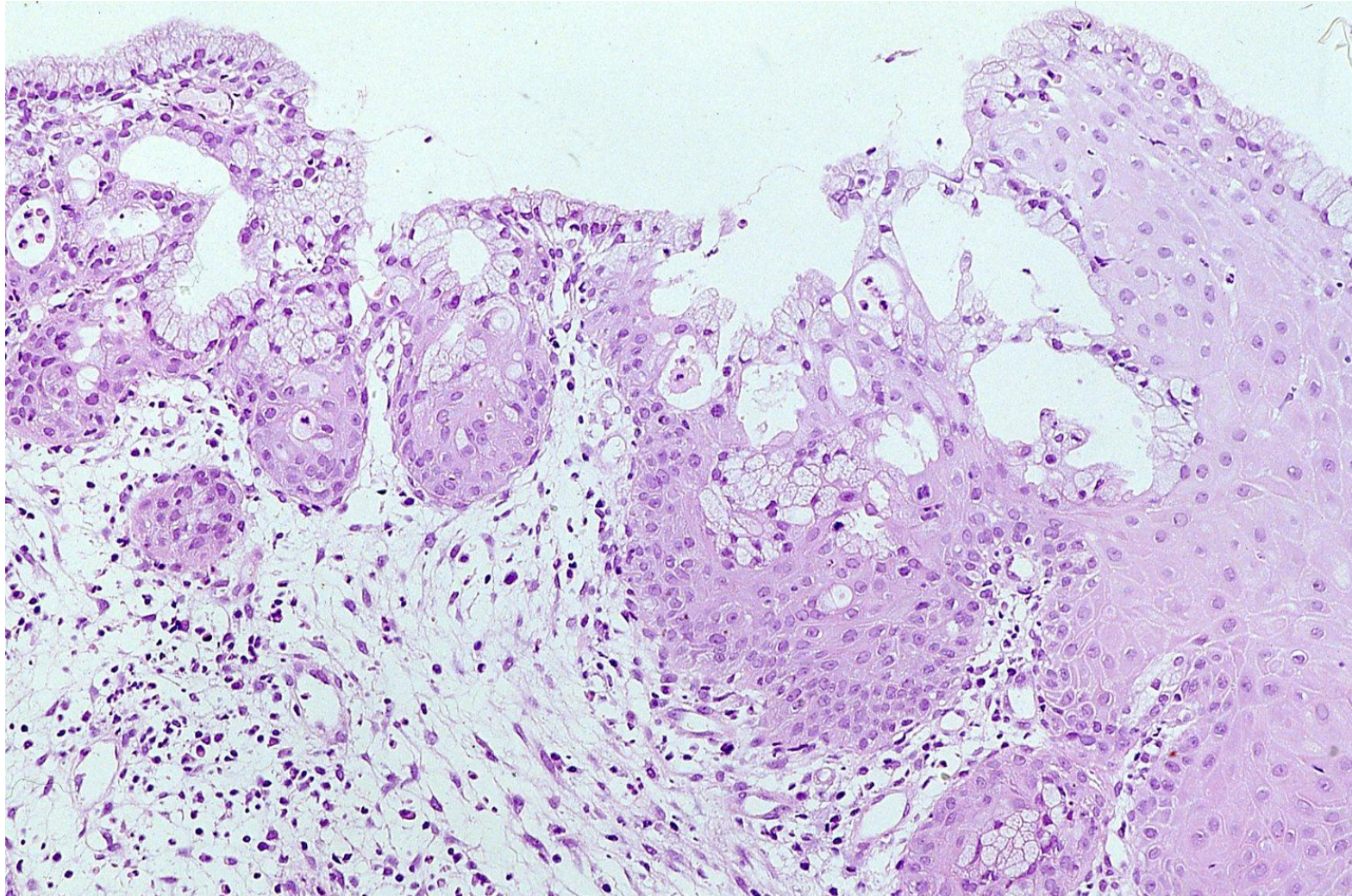
Reserve cell hyperplasia in the endocervical mucosa seen in a female case aged 30's (H&E-3). The thickened reserve cell layer is noted not only in the covering mucosa but also in the cervical gland.



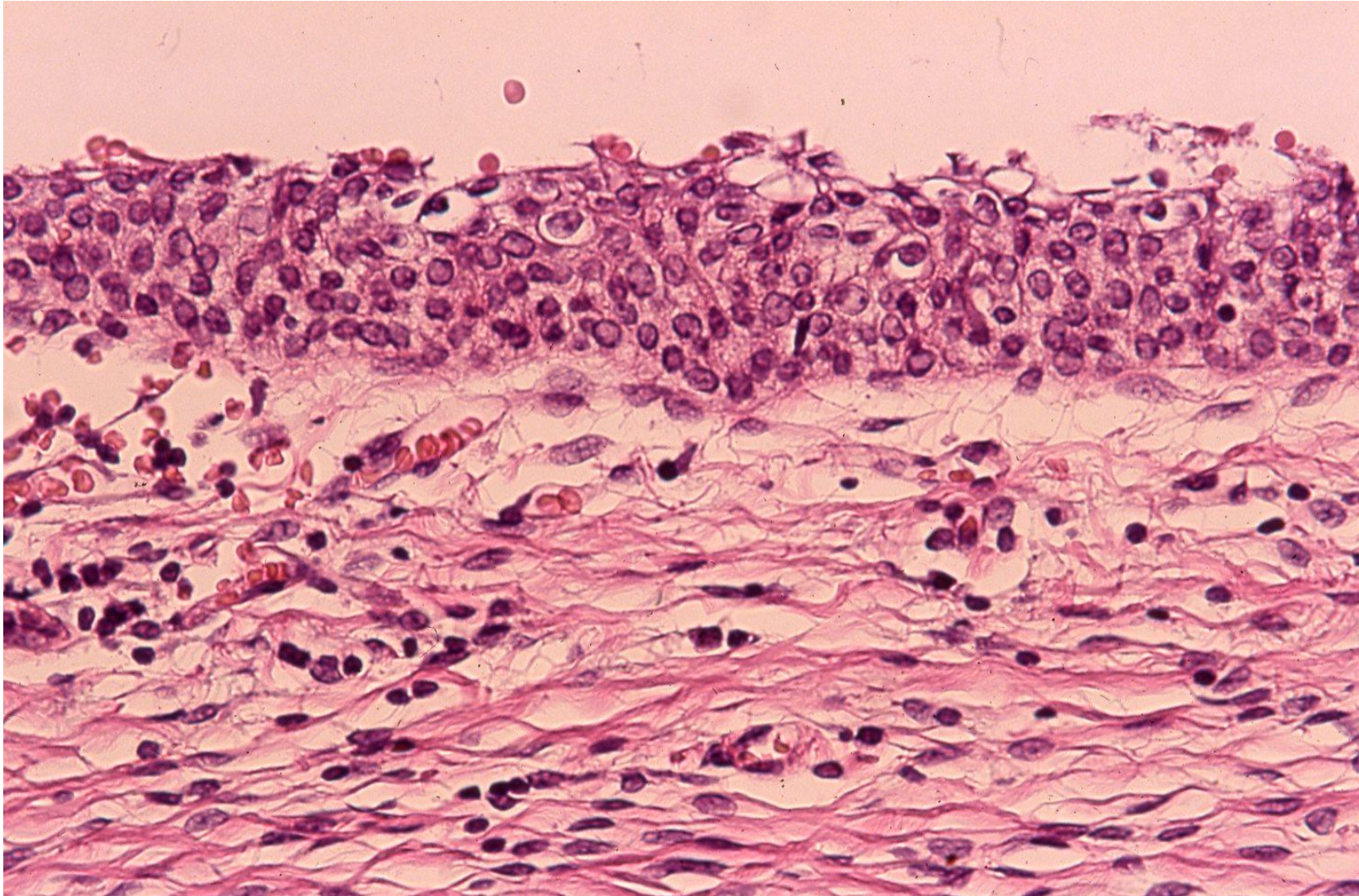
Reserve cell hyperplasia in the endocervical mucosa seen in a female case aged 30's (H&E-4). The thickened reserve cell layer is noted not only in the covering mucosa but also in the cervical gland.



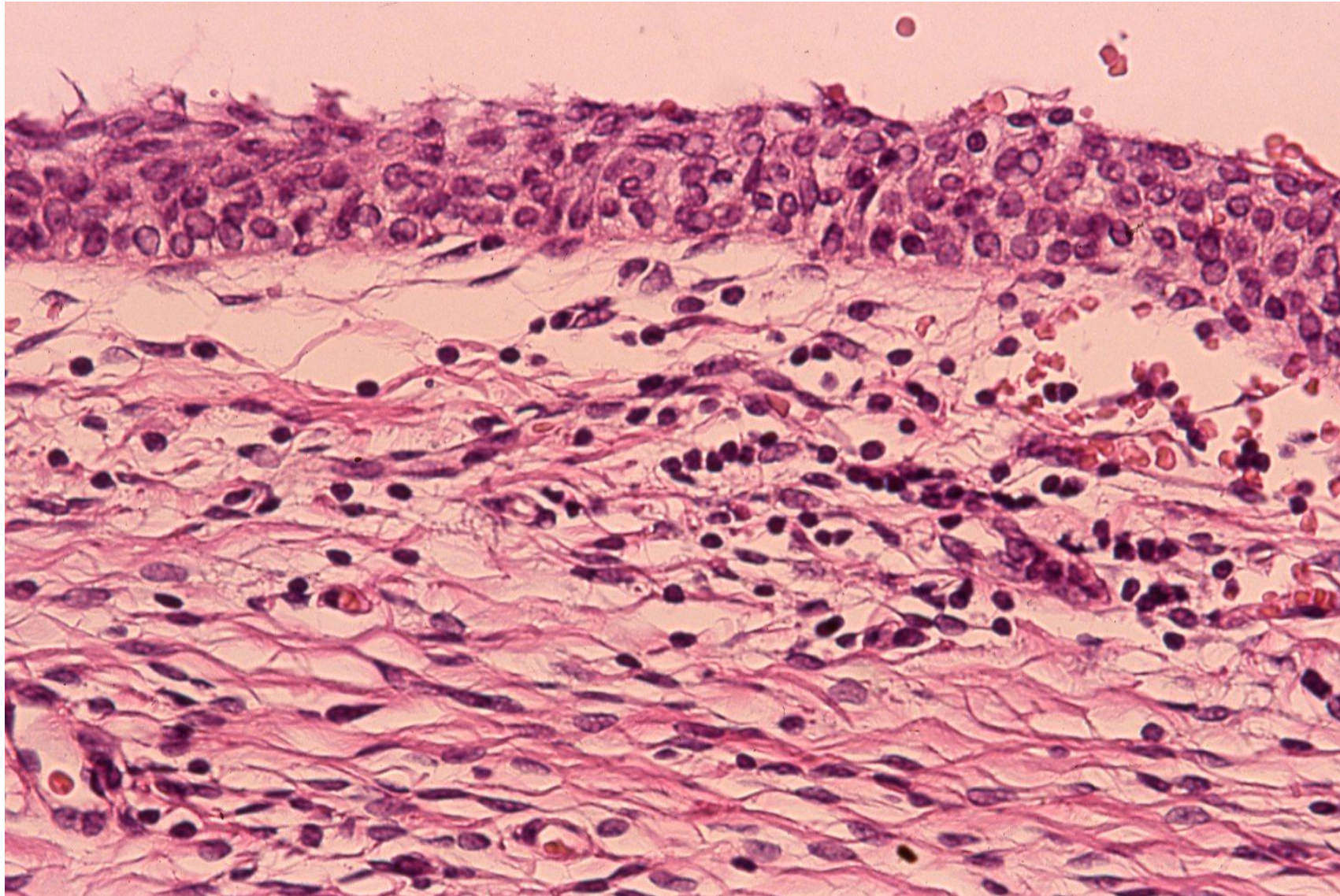
Squamous metaplasia arising from reserve cell hyperplasia in the endocervical mucosa of a female case aged 30's (H&E-5). Squamous metaplasia consists of prickly cells with intercellular bridge formation. The mucous columnar cells are retained on the superficial layer.



Squamous metaplasia arising from reserve cell hyperplasia in the endocervical mucosa of a female case aged 30's (H&E-6). Squamous metaplasia consists of prickle cells with intercellular bridge formation. The mucous columnar cells are retained on the superficial layer.



Senile colpititis seen in a female case aged 60's (H&E-7). After menopause, the squamous mucosa is replaced by parabasal cells (or activated reserve cells) lacking prickle cell differentiation.



Senile colpitis seen in a female case aged 60's (H&E-8). After menopause, the squamous mucosa is replaced by parabasal cells (or activated reserve cells) lacking prickle cell differentiation.