

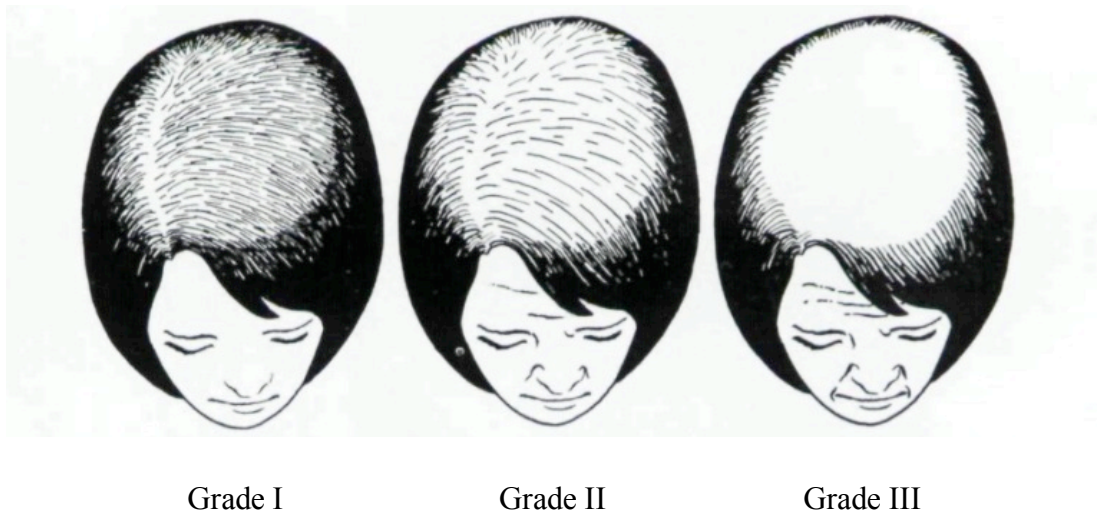
FEMALE PATTERN HAIR LOSS (FPHL)

In 1977, Ludwig clearly described the distinctive features of FPHL and classified it into three grades of severity referred to as Ludwig grades I, II, and III¹.

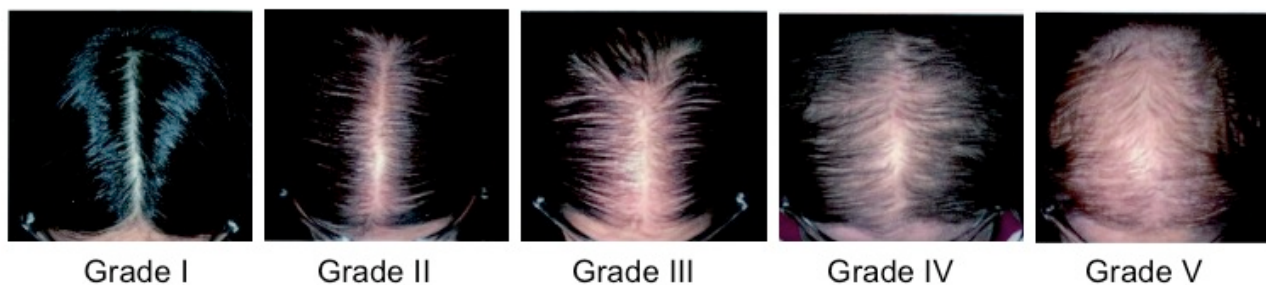
Grade I. Perceptible thinning of the hair on the crown, limited in the front by a line situated 1-3 cm behind the frontal hair line.

Grade II. Pronounced rarefaction of the hair on the crown within the area seen in Grade I.

Grade III. Full baldness (total denudation) within the area seen in Grades I and II



Sinclair et al² validated a five-point photographic grading system based on part width in view of the low sensitivity of the Ludwig scale to detect subtle changes in hair density.



¹ E. Ludwig, "Classification of the types of androgenetic alopecia (common baldness) occurring in the female sex," *British Journal of Dermatology*, vol. 97, no. 3, pp. 247-254, 1977

² R. Sinclair, D. Jolley, R. Mallari, and J. Magee, "The reliability of horizontally sectioned scalp biopsies in the diagnosis of chronic diffuse telogen hair loss in women," *Journal of the American Academy of Dermatology*, vol. 51, no. 2, pp. 189-199, 2004.