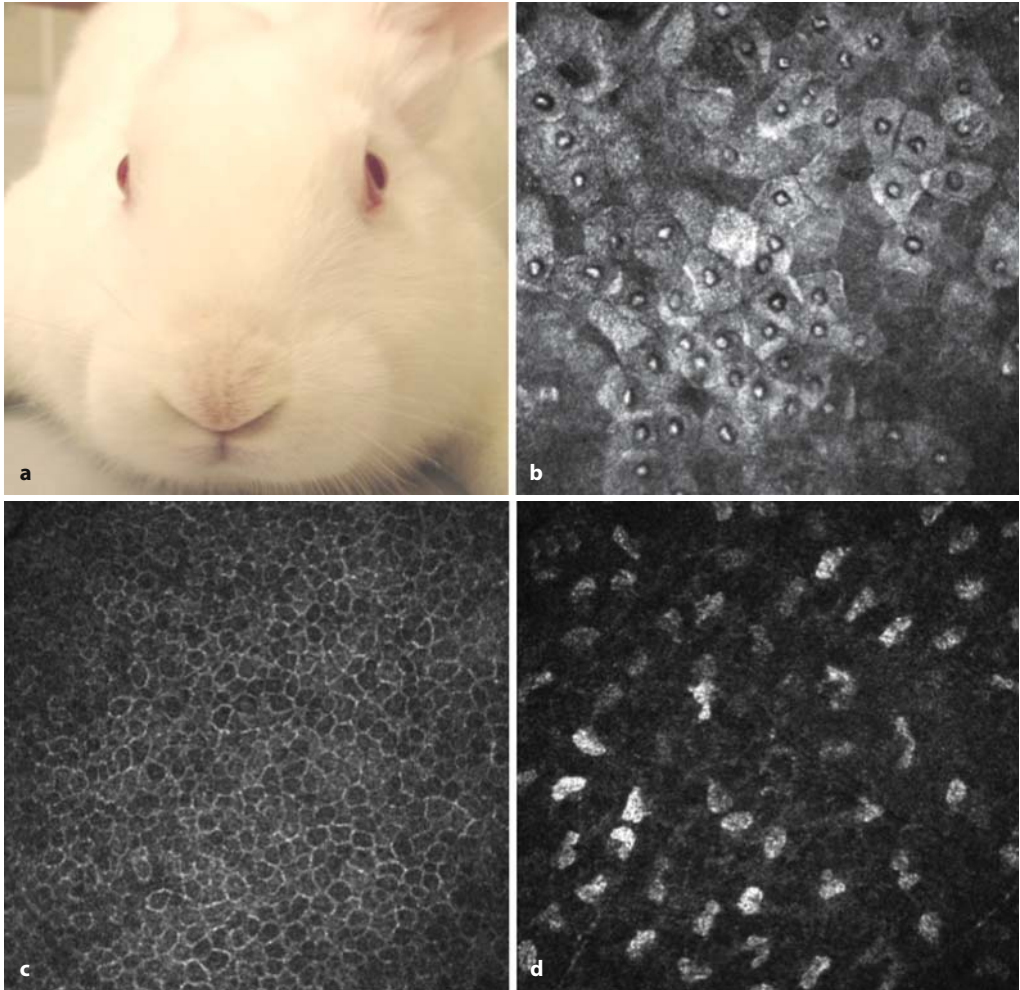


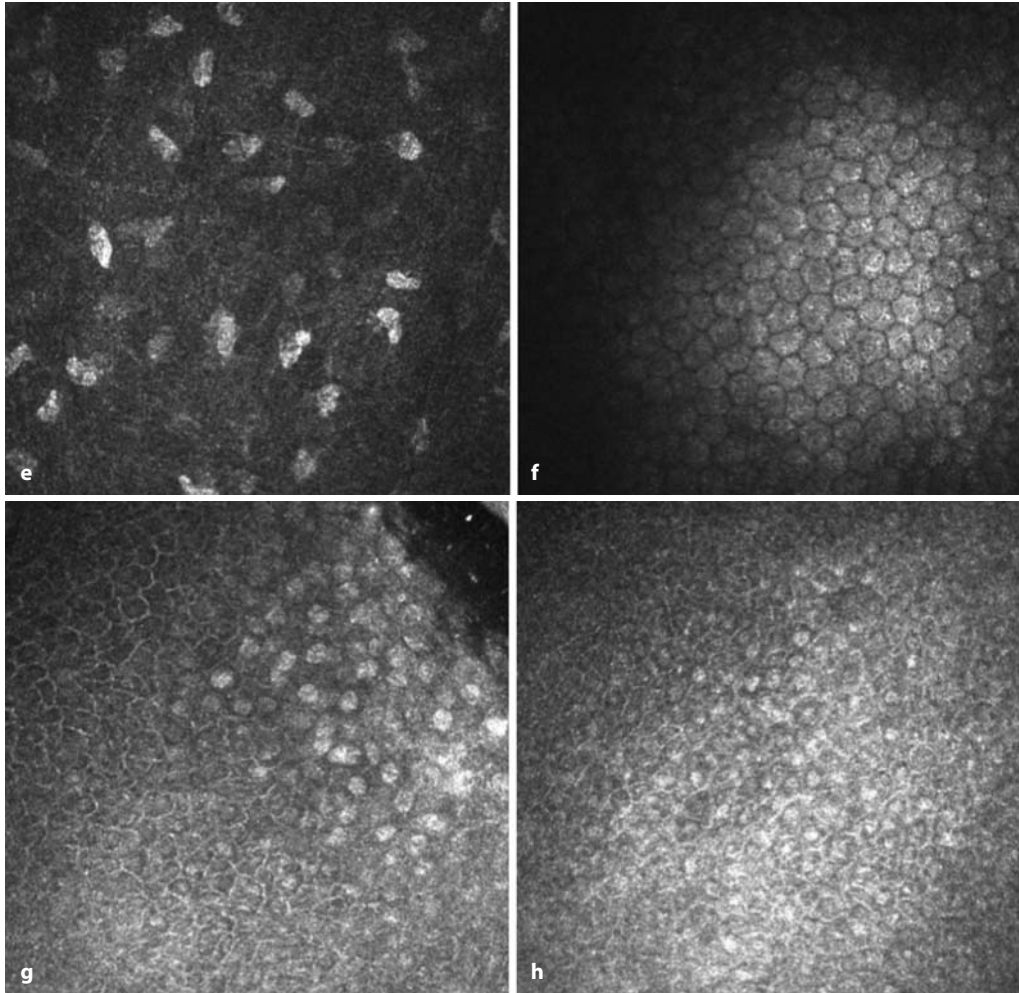
Experimental studies using confocal in vivo microscopy can be performed in laboratory animals. The different corneal layers, the conjunctiva, the iris, and the lens can be evaluated in

animals at the cellular level, under normal or pathological conditions. The advantage of this technique is that the animals do not need to be sacrificed.

## 8.1 Rabbits

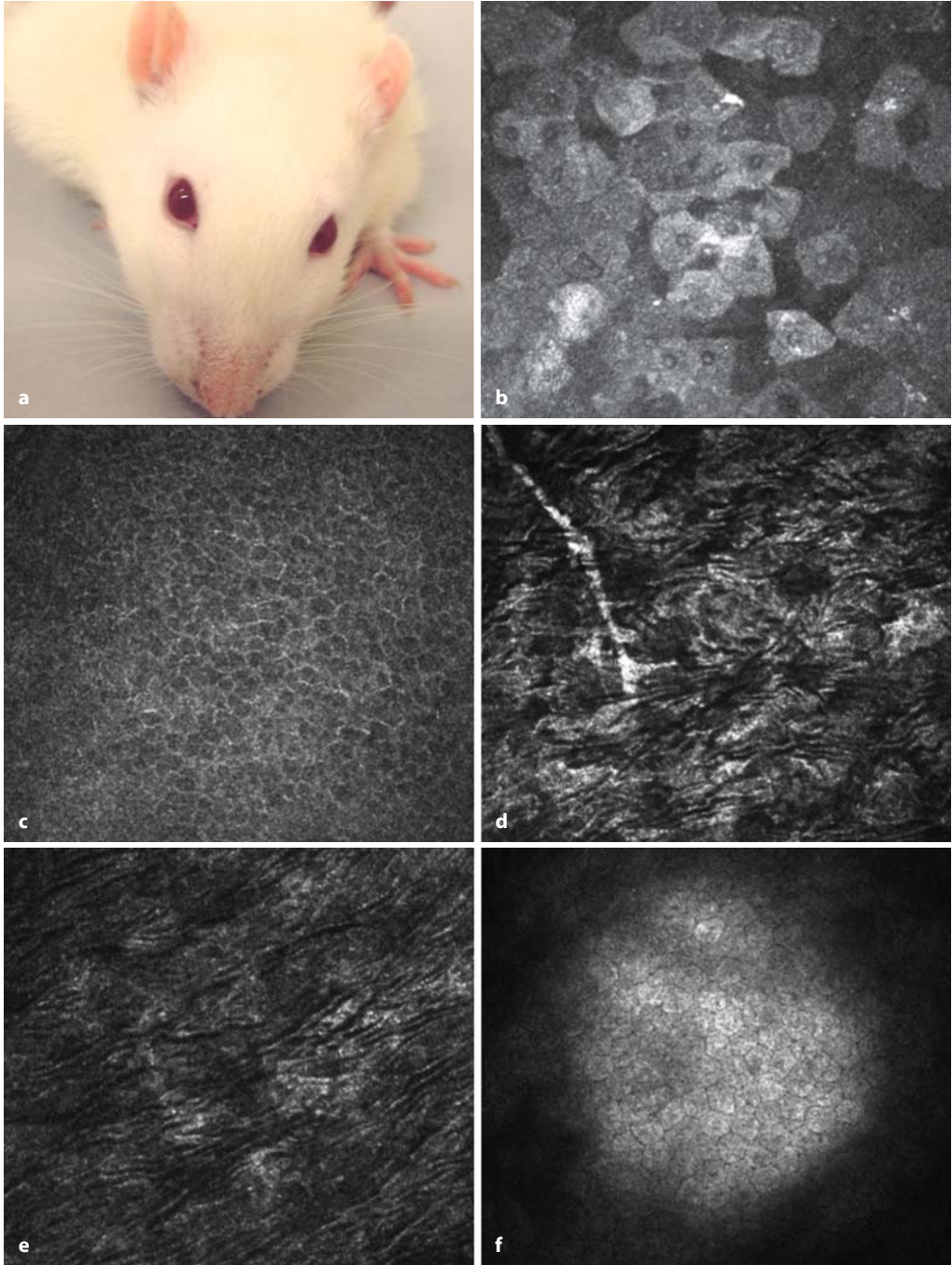


**Fig. 8.1 a–h** Rabbits. **a** Photograph of a New Zealand white rabbit. **b** Superficial corneal cells. **c** Basal corneal cells. **d** Anterior stroma.



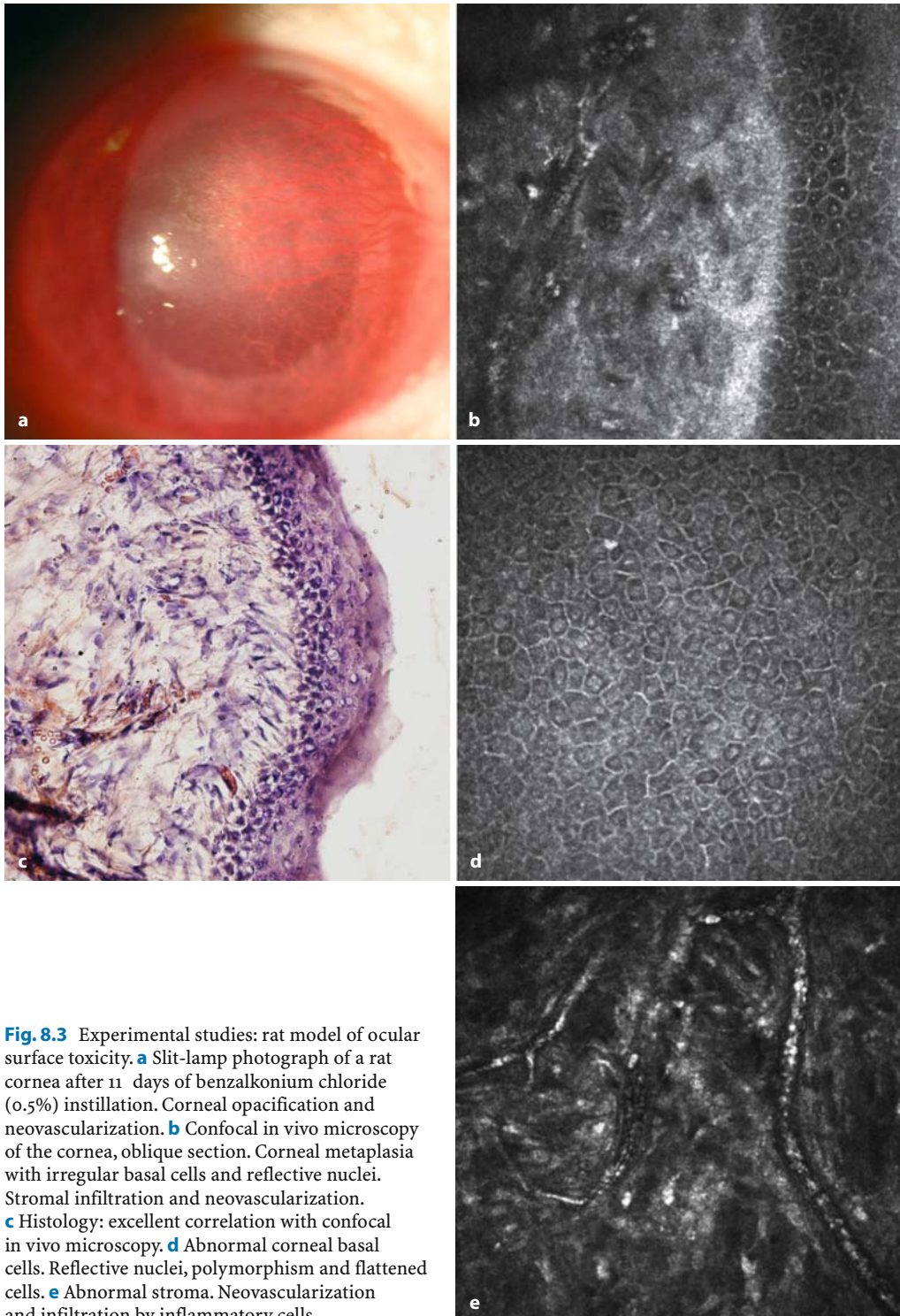
**Fig. 8.1** (continued) **e** Posterior stroma. **f** Endothelium. **g, h** Conjunctival superficial cells and goblet cells (round reflective cells)

8.2  
Rats

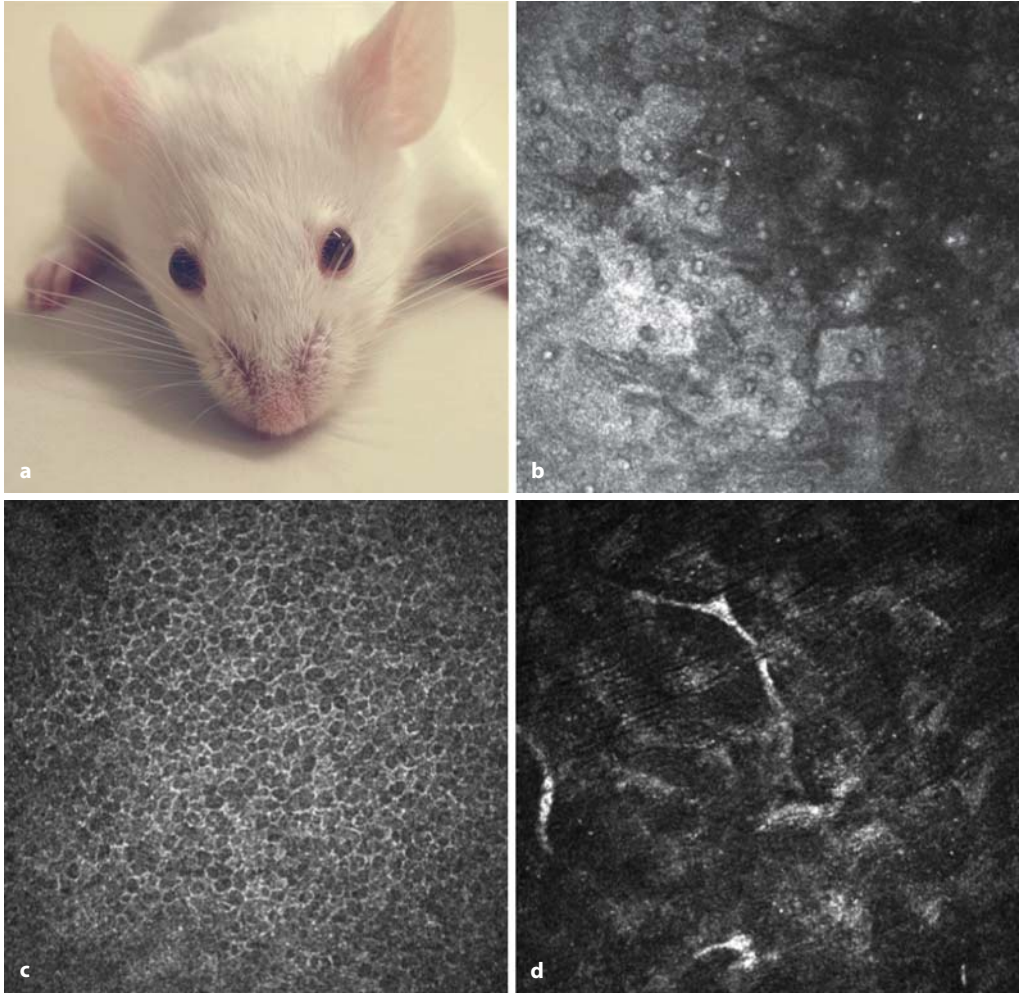


**Fig. 8.2** Rats: normal corneal structures. **a** Photograph of a Lewis rat. **b** Superficial corneal cells. **c** Basal corneal cells. **d** Anterior stroma with a corneal nerve (reflective). **e** Posterior stroma (reflective). **f** corneal endothelium

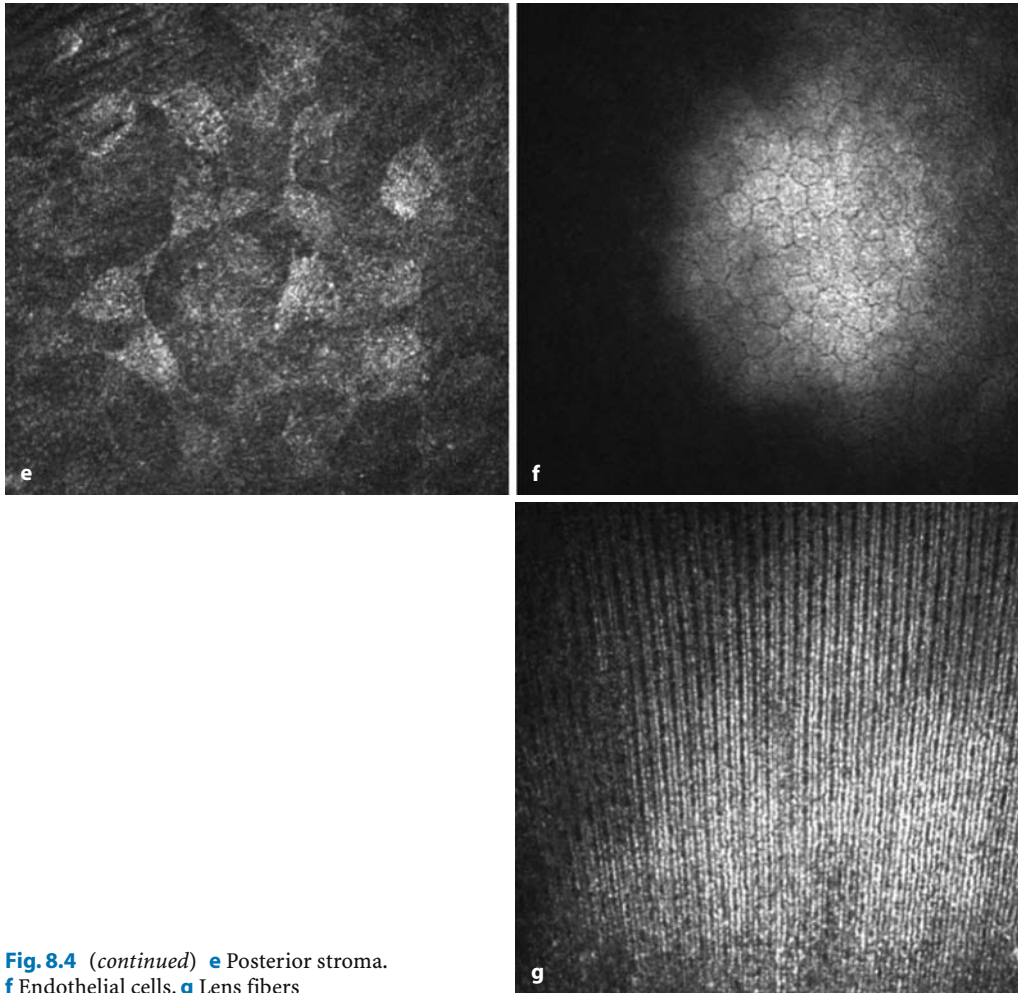




**8.3**  
**Mice**



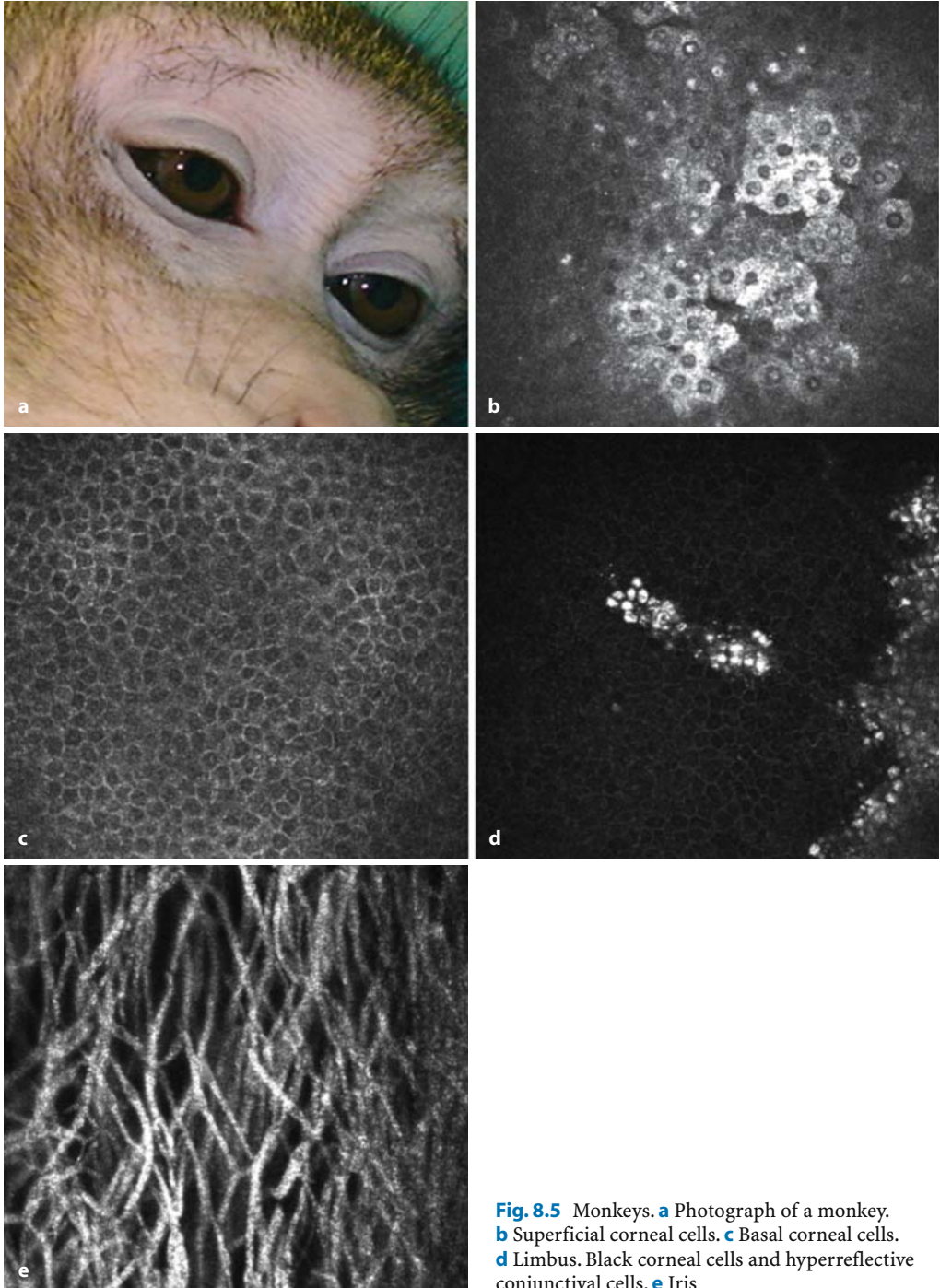
**Fig. 8.4 a–g** Mice. **a** Photograph of a Swiss mouse. **b** Superficial corneal cells. **c** Basal corneal cells. **d** Anterior stroma with corneal nerves (reflective structures)



**Fig. 8.4** (continued) **e** Posterior stroma. **f** Endothelial cells. **g** Lens fibers



8.4  
Monkeys



**Fig. 8.5** Monkeys. **a** Photograph of a monkey. **b** Superficial corneal cells. **c** Basal corneal cells. **d** Limbus. Black corneal cells and hyperreflective conjunctival cells. **e** Iris