Results A 28-year-old female experimental animal trainer was referred for suspected occupational asthma. She worked with rhesus monkeys for about 6 years, as a lab technician in a university neurophysiology lab, performing mainly cognitive testing. She had daily contact with the test animals. The animals were living on sawdust.

The patient experienced respiratory symptoms 2 years after she started working on the experimental lab. She had progressive wheezing and non-productive cough. The respiratory symptoms were accompanied by irritation of eye and nose mucosa, itching papules on forearms with accidental blood splashes or scratch injuries by the monkeys, spontaneously disappearing after 10 min.

Specific IgE test to rhesus monkey was not available; screening to other possible (extra-) professional exposed allergens was negative. Her total serum IgE was not elevated (55 kU/L), blood eosinophil count was elevated (0.3 × 10^9; 6.9%). Spirometry showed supra-normal volumes and normal exhaled nitric oxide (FENO 16.40 ppb at flow of 50 ml/sec). Histamine provocation test showed a mild bronchial hyperactivity (PC_{20}=1.47 mg/ml). Serial peak expiratory flow recordings performed were suggestive of occupational asthma (OASYS-score=3.67).

We did not perform skin prick testing with rhesus monkey saliva, blood, urine or hairs (epithelium) because of ethical reasons (possibility of infectious contaminated material). So we decided to perform ex vivo testing (basophil activation test).

Conclusion This is the first case demonstrating the possible role of rhesus monkey exposure in the development of occupational asthma.