The Training Simulator for Binocular Indirect Ophthalmoscopy

Eyesi Simulators
Augmented reality in medical training!
Better diagnostic skills in a shorter period of time

The Eyesi ophthalmoscope is a training simulator for binocular indirect ophthalmoscopy. The integrated augmented reality technology provides a highly realistic experience for retinal examinations. With a wide-ranging database of clinically relevant pathologies, the Eyesi ophthalmoscope enables highly effective training of diagnostic skills. The simulator consists of a head-mounted display, a model head as well as a diagnostic lens and is operated exactly like a real ophthalmoscope. A touch screen is used for system control. Trainees can document their diagnostic findings in a fundus scheme editor. The training system also provides detailed evaluation of both procedural and diagnostic skills.

- Wide range of available pathologies
- Training without stress on patients
- Objective evaluation
- Effective learning through activity-based knowledge transfer

The Eyesi ophthalmoscope consists of data eyeglasses, a patient model head, a freely movable diagnostic lens and a PC with touch screen for system control.

From VRmagic, the makers of the award-winning Eyesi surgery simulator.
A wide range of pathologies, including macular degeneration, diabetes mellitus, toxoplasmosis, and vein occlusions, is available on the Eyesi ophthalmoscope.

A wide range of pathologies at your fingertips!
Expertise comes from experience

With the Eyesi ophthalmoscope, students can examine a wide range of clinically relevant cases before they meet their first real patient. Available pathologies range from macular degeneration and diabetes mellitus through to toxoplasmosis and central vein occlusion. Case descriptions and the clinical records of the virtual patient are provided by the training system. A fundus scheme editor and a diagnosis specification tool allow trainees to describe diagnostic findings in detail. The diagnosis is evaluated by the system for immediate feedback. All evaluation data is recorded for analysis by the educator.

Knowledge from hands-on experience!
Objective assessment of retinal examinations

As in real ophthalmoscopy, the diagnostic lens and the light source of the Eyesi ophthalmoscope have to be aligned properly in front of the model eye to render fundus images. Students learn how to cope with inverted images and how to move the diagnostic lens correctly. Indirect ophthalmoscope settings such as the stereo base of the ophthalmoscope, lens types or the light intensity can be modified on the user interface. Various examination parameters, such as the retinal area visible in the magnifier, examination time or possible light toxicity, are recorded by the system for objective assessment of procedural skills.

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