

Self-assembly of a simple low-cost dermoscope for examination of skin lesions

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Dermoscopy is helpful not only in the early differentiation of melanoma from nevus and other pigmented skin lesions, but also in the diagnosis of non-pigmented skin lesions. However, the dermoscopy device, or dermoscope (or dermatoscope), is usually viewed as either unnecessary or expensive by young dermatologists. In reality, there is no need to buy one to start learning/practicing dermoscopy because all the components of such device are already available in most dermatology clinics; all that is needed is the assembly of the different components to construct a dermoscope and use it to examine pigmented skin lesions. The assembly of a dermoscope requires four items: echo-gel, a glass slide, a penlight or electric torch, and an eyepiece lens of a microscope (or a 10-power magnifying lens). The assembly process is simple and includes placing an appropriate amount of echo-gel on the skin lesion, then mounting a glass slide, illumination of the lesion at an angle from above using a torch, and examination of the lesion using the eyepiece lens (Figure 1). All dermatologists who do not have a commercial dermo-



Figure 1. The assembly process includes placing echo-gel on the skin lesion, then mounting a glass slide, illumination of the lesion at an angle from above using a torch, and examination of the lesion using the eyepiece lens. [Copyright: ©2013 Sawada et al.]

scope are encouraged to try this and start dermoscopic examination in the outpatient clinic!