

## Miscellaneous.

### Epistaxis.

The most positive and dependable remedy we now have for the checking of nasal hemorrhage is the extract of suprarenal gland, or adrenalin. Within a very brief period after applying to the part the mucous membrane becomes blanched and the bleeding ceases. In quite all varieties of capillary hemorrhage from mucous surfaces this method of treatment is highly efficacious.—*The Clinical Review*.

### Experiments with Adrenalin.

Elsberg, in *American Medicine*, gives a very comprehensive report of a series of experiments with adrenalin chlorid as an addition to solutions for local anesthesia. He says: "Adrenalin chlorid, which is the active blood pressure-raising principle of the suprarenal gland recently discovered and investigated by Dr. Takamine, is now on the market as an amorphous crystalline powder, or in the form of a 1-1000 solution. It is a powerful astringent, so that a drop of a 1-10,000 solution will blanch the conjunctiva in from thirty to sixty seconds.

"Elsberg has been carrying on a series of experiments with this new drug, and finds that if a drop of a 1-1000 solution be injected under the normal skin a slight burning sensation is felt, but no anesthesia occurs. Within one minute an area of skin about two inches in diameter becomes blanched and almost bloodless, and remains so from six to twelve hours. The same effect will be observed if a 1-5000 to 1-15,000 solution be used, but with these weaker solutions the blanching appears only after a few minutes and disappears after three to six hours. After the blanching of the skin disappears the tissue apparently returns to its normal condition. No deleterious effects, such as sloughing or subcutaneous ecchymosis, ever followed these injections. In the course of the investigations cocain and eucain solutions containing adrenalin in the proportion of 1-5000 to 1-20,000 were used. It was found that the anesthetic properties of the cocain and eucain were preserved, while the adrenalin caused the same blanching of the tissues as previously observed, which extended one to two inches beyond the area infiltrated.

"In performing minor operations under cocain, to which 1-5000 to 1-20,000 adrenalin had been added, only the larger vessels bled when cut across. The smaller vessels were contracted so tightly that no blood could escape from them and therefore there was no oozing. It was unnecessary to sponge off the wound a single time during an operation. The healing of the wound was not interfered with in any way. Upon theoretical grounds it was expected that secondary hemorrhage would take place in from three to twelve hours, as the