

plasma was considered to promise the best results, the blood being of such an alkalinity as kept the balance between exosmosis and endosmosis, and certainly was a typically non-irritating medium and incapable in a normal state of inducing any pathological cellular change.

Castaigne and Rothery (1) have demonstrated that a saline solution must be of a certain cryoscopic index, about 0.78C. If higher or lower it brings about histological changes in the tissues and they believe that under normal physiological condition the osmotic tension is maintained by the sodium chloride and other salts being in proper proportion in the blood plasma.

Achard and Paiseau (2) by intravenous injections of hypotonic and hypertonic saline injections .20 to 1.50C were able to set up epithelial changes in the kidney. Experiments by Roth-Schulz and deKarosy (3) are of interest as regards endosmosis and exosmosis. With blood upon one side of an animal membrane diffusion is much slower than when water is used, owing to the different diffusibility of some of the blood salts, the chlorides passing more readily than the others contained in the plasma.

All this shows us that any solution of the same cryoscopic index, the same osmotic index, having the same salines and the same specific gravity as the blood plasma, must of a necessity be the most scientifically adapted to the purpose of a cleansing spray, or where it is desirable to use a non-irritating injection into the tissues of the body.

Any solution stronger or weaker is capable of bringing about cellular change, and upsetting the normal osmotic balance so necessary to a healthy condition of the parts. In consideration of these facts, I had a tablet made by Parke, Davis & Co., containing the osmotically active salts of the blood which, added to 1,000 drops of water, made a solution of the same alkalinity, specific gravity and cryoscopic index as the plasma. For two years it was made up for my own use. Then, after sending samples to Europe and America, the firm got such encouraging reports that my permission was asked to place the tablets upon their public list. This was given and the Plasma Nasal tablet (Dr. Murray McFarlane) for use in the nose and throat may now be obtained from the above and several other firms of manufacturing chemists. They are year by year increasingly used in different parts of the world; and the writer has received many very gratifying reports from some of the most eminent men in the medical profession, telling of the satisfaction they had derived from their use in affections of the nose and throat especially; they finding it, as I have done, to furnish, where sprays are indicated, a cleansing medium which can be used for an indefinite period without the slightest irritation or engorgement of the tissues. The addition of 1/16 of a grain of menthol