

A WORD ABOUT LUBRICANTS

By H. B. DUNHAM, Ph.G., M.D.

ALL of the serous, mucous, and synovial membranes of the body are constantly supplied with a lubricating fluid. If this fluid is absent or becomes deteriorated in lubricating power, friction of the parts is attended with pain, and more or less inflammation results. Injury, from toxins or otherwise, may be only sufficient to paralyze the secreting cells, so that friction and lack of drainage are necessary before serious inflammation is induced or prolonged. Inflamed membranes recover their integrity, if the proper lubricant is present, much earlier than otherwise, as the additional irritation of friction is avoided and opportunity for adequate drainage and rest is secured. If the opposing surfaces remain unlubricated and rough, nature comes to her endurance-limit of friction, and movement is made impossible by adhesion. The inflammation is cured, but the cure (by stricture) is in most cases as bad as the disease.

The choice of a lubricant by the physician is not such an insignificant matter as might be supposed. Oils and greases are *not* lubricants to watery tissues. A lubricant *per se* coheres to the surface lubricated, and the molecules of the lubricant, by rolling, one upon the other, reduce friction to a minimum. When water is interposed proper cohesion of the grease to the rubbing surfaces is prevented, and the lubricant serves only as a separating pabulum—a condition similar to that of loose ball-bearings filled with dust. Nature uses the proper lubricant on her membranes; it is not greasy; it is an aqueous solution of mucin, which is soothing and even nutritious to the superficial cells. Such a substance is produced by treating chondrin with superheated steam, thereby converting it into mucin, which, being subsequently boiled, the highest degree of lubricity for a substance of its consistence is attained. The name of "muco-lubricans" has been given to this substance, which is so slippery that it has also acquired the facetious appellation of "greased lightning." A more definite conception of its slipperiness, however, is conveyed by the statement of eminent genito-urinary surgeons that they can use sounds one or two sizes larger with muco-lubricans than with oil, and notice at the same time that less pain is experienced by the patient. Obstetricians and gynecologists find that this lubricant fulfills the most exacting conditions, as it is obtained in tubes in which it remains sterile while in constant use. That it is extremely desirable and applicable to the greatest variety of uses goes without saying, and the fact of its being the cheapest

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lubricant that can be used does not detract from its virtues. When used in examinations, the nails, wrinkles, and pores of the hand are filled and covered by an absolutely antiseptic substance, so that danger of infection by the *accoucheur* is reduced to *nil*, the hand is protected in case of vaginitis or specific disease, and if there be pain it is not augmented by friction. It has been used with great success in dry labors, as it is more slippery than the natural secretions.

Although mineral oils furnish no nourishment for microbes, the danger is more subtle on that account, for the spores and germs buried in it do not advertise their presence by decomposition, but await the favorable conditions, when they are spread in a thin layer, over possibly an abraded surface, before multiplying. Being soluble in water, muco-lubricans washes from the hands immediately, and neither towels, coated with germs and grease, nor stained underclothing is ever the result of its use. Instruments are cleaned and kept sterile much easier and more thoroughly when muco-lubricans is used.

Dr. ROBERT L. DICKINSON, of Brooklyn, says, with many other prominent gynecologists, "that of the many things which contribute to the pleasure and perfection of my practice, muco-lubricans stands at the head!" "If you mention my name in connection with muco-lubricans, use all superlatives; it is a pity that physicians do not know more about it."

Muco-lubricans has been used in inflammation of the mucous membranes, with the happiest results; urethritis, vaginitis, vulvitis, cystitis, hemorrhoids, erysipelas, etc. being most amenable to such treatment. Bichloride, carbolic acid, cocaine, ichthyol—in fact, anything soluble in water—is easily dissolved or, if an insoluble powder, is held in suspension by it. Besides medication, the two essentials—rest and drainage—are also secured; for, as it is watery, the fluids interchange by dialysis, and the antiseptic medicament, as it is absorbed, is replaced by soluble poisons of the inflammation. Several hundred cases of acute urethritis have been treated in this manner with the most gratifying results.

Haverhill, Mass.