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REPERCUSSION.

Translated from the French of Guersent, by J. Sidney Crane, M.D., of St. Louis.

REPERCUSSION is a name given to an effect produced by certain topical applications, by aid of which the physician designs to repress and repel external morbid alterations, or even those which are more deeply seated.

Thus, repercuSSION is a medication not limited solely to the skin or external mucous membranes: it is extended also to diseases of the mucous canals, the orifices of which open without, and even propagates its action further under the sub-dermoid cellular tissue, and sometimes upon the organs deeply placed within the cavities. RepercuSSION is the result of many and most varied therapeutic means, which do not reside in a particular property, common to a special class of medicaments, but is the product of the application of bodies of different qualities.

Cold, iced and hot water, pure or medicated with acid, saline or alkaline solutions or astringent decoctions, &c., are employed as repellents. These liquids can be administered according to the case, under the form of lotions, injections, washes, baths or douches. To produce the same effects, solid astringent substances combined with lard, under the form of pomatum, are also employed. Pomades of the acetate of lead, of the sulphates of alumina and copper, tannin, rhatany, &c., called repellents, are also prepared with cerate of suet. These therapeutical agents, although differing in many respects, in their particular effects, produce, nevertheless, the same local and topical action; they all constrict the capillary net-work of the skin, and increase its action. Cold and hot water, notwithstanding the opposite effects which they at first appear to produce, conduct to the same result. When repellents are administered under the form of the douche, the shock that they cause contributes to produce a still more marked constriction of the cutaneous vessels; this first effect being produced, the immediate properties of the various medicinal agents act with great power. Alkaline, saline or astringent solutions constrict of themselves the cellular and vascular net-work of the skin, and increase the density of the dermis. Certain substances, such as the acetate of lead, the protonitrate of bismuth, act, besides, in blunting the sensibility of the contracted parts, and preventing their re-actions. Among the number of repellent agents ought also to be named, the different modes of compression, and particularly the bandage of Theden. Moderate compression

of the dermis, by opposing the infiltration of the cellular tissue, increases, at least momentarily, the activity of the capillary system, favors the resorption of fluids already effused, and establishes a true repellent action, but in a mechanical manner. Consequently the therapeutical effects of repellents are confined to the following: they constrict the vascular and cellular systems of the skin: they at first blunt their sensibility somewhat after the manner of astringents: they repress by this action the over-abundant secretions, and cutaneous, gaseous, serous and sebaceous exhalations, and prevent morbid secretions resulting from chronic phlegmasiæ of the skin. Gradually the impression produced communicates itself to the sub-cutaneous cellular tissue and even to the subjacent parts, thus favoring the resorption of sanguineous, serous and purulent secretions, which might remain under the dermis, the cellular tissue, or even deeper, in the glands. It is upon these immediate effects that the advantages and inconveniences of repellents depend.

Cold and iced water have been employed with success, as is well known, in cases of strangulated hernia, when emollients were without effect. The utility of these therapeutical means has been also well established by many examples of superficial aneurism. I have seen recently an aneurism of the popliteal artery which was thus reduced from two thirds of its volume to a simple indolent tumor, hard, and, as it were, fibrous, in which there could hardly be perceived any arterial pulsation.

It is principally in the extensive phlegmonous erysipelas of the limbs, which threatens gangrene to a large portion of the skin, and in certain whitlows, that the compressive bandage of Theden has been used with almost constant advantage. M. Recamier some years since made a happy application of methodical compression in many cases of inflammation of the breast, and has succeeded by these therapeutical measures in obtaining a complete resolution of large tumors of the mammæ, which had resisted all other medicatio; he has even obtained by this compression a manifest amelioration in certain cancers of the mammæ.

The therapeutical use of repellents in chronic cutaneous affections requires great circumspection. It cannot be denied that their administration, when wisely directed, conduces powerfully to the cure of many of these affections, and it is even difficult to effect that cure in many cases, without the use of lotions and either the alkaline douche, or that medicated with hydrosulphuric acid, or without employing some of the pomades more or less stimulating to modify the state of the skin; and, in reality, all these means are true repellents. The prudent physician, however, will not resort to the use of such therapeutical agents until well assured of the condition of the patient, and after having taken all proper precautions to prevent the inconvenience which may result from their use. He ought also to examine every organ with care, to determine if any of them present traces of alteration of tissue; and if the most attentive examination proves them to be in a state of perfect

integrity, and the individual appears to enjoy good health, he will employ repellents with care, together with revulsives in the intestinal canal and blisters, setons, moxas, &c., to prevent the consequences of retrocession of these cutaneous irritations, the sudden suppression of which is dangerous in proportion to the length of time they have existed. Notwithstanding the utility of purgatives and cutaneous suppurations in these cases, they often do not suffice to counterbalance the inconvenience resulting from the use of repellents, and to oppose the development of organic lesions which often follow their employment. There is scarcely a physician who has not many times met in his practice individuals affected with cancer of the stomach, intestines, liver and uterus, or with tubercles of the lungs developed more or less rapidly, after the inconsiderate use of repellents, in old and stubborn cases of acute eczema and porrigo. However, the influence of repellents in the production of organic disease has been, doubtless, exaggerated, for it is more than probable that in many such cases the alteration of tissue precedes the use of repellents: but admitting even a simple coincidence, it is certain that the rash employment of repellents in cutaneous diseases connected with organic alteration, hastens the development of the latter.

It is clearly proved by experience that the astringent pomades employed by charlatans for the cure of ring worm, as well as many of the cosmetics in use among females, frequently give rise to acute and chronic diseases; medical works are filled with observations which determine the truth of this remark. Infants are more exposed than adults to the bad effects of repellents; I have seen many fall victims to bronchitis, to pneumonia or chronic enteritis, with and without tubercles, after the recession of porrigo larvalis or of other cutaneous affections situated upon the face or body. It is necessary, then, to abandon the use of repellents in the therapeutics of chronic cutaneous diseases, at least in every case where the health of the individual is doubtful, and to employ them under no circumstance without the precautions pointed out for the purpose of preventing the inconvenience arising from their use.

Repellents, on the contrary, are commendable, and can be employed with success and without danger, in certain simple cases of blennorrhœa, especially if they are recent, and with still more advantage in ophthalmia or ophthalmo-blennorrhœa, either acute or chronic: repercussion in these cases is so powerful an agent, that repellent collyria and the application in particular of nitrate of silver in solution, and even with the solid stick, are now in every-day use.

It is necessary to rank also among the number of effects of repercussion, the influence, more or less active, of irrigations, of affusion and of the douche, in most of the acute or chronic diseases which have their seat near the internal organs, and particularly in cases of serious and extensive contusions, of deep-seated abscess and of cerebral affections.—*St. Louis Medical and Surgical Journal.*