PROPOSED METHOD TO PREVENT PITTING AFTER SMALL-POX.

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THE fearful epidemic of small-pox now raging in Paris and elsewhere, inclines me to bring forward a former suggestion of mine to prevent the "pitting" consequent upon this frightful disease, where it exists in a moderate and not in the virulent and lethal forms. This plan was published several years ago; but, for the obvious reason that my practice is chiefly confined to the treatment of chronic diseases of the skin, I have had few opportunities of verifying it by experience, although, whenever a chance has occurred for doing so, the expedient referred to has seemed to have accomplished the end anticipated. I would preface my suggestion by the mention of two axioms which have guided me in its proposal. The first is, that it is the characteristic of small-pox to form a slough under each individual pustule; the second, is an affirmation by John Hunter, that two similar diseases cannot coexist in the system at the same time. "For example", he states, that "if you can succeed in changing the nature of an inflammation, you can often cure the original complaint." Blistering in erysipelas, and Higginbottom's method of vesication with nitrate of silver, are familiar illustrations of this Hunterian law. The plan which I have proposed with the above ends in view is, as soon after the precise nature of the small-pox eruption becomes manifest, to blister, by means of a small camel's hair-brush, each individual pustule, with the ordinary vesicating liquid of the *Pharmacopœia*, or with the "liquor vesicatorius", made by Bullen, or with the blistering caustic of the Skin Hospital *Pharmacopœia*. The face should be previously washed with a little pure ether, or with rectified spirit of wine, to remove any secretion from the skin which might interfere with the action of the blistering fluid. When the parts required have been painted over with the vesicator, and the skin, by turning white, shows that the blister has taken due effect, the pustules, or, if the eruption be confluent, the face, should be varnished over with flexile collodion made after the plan I originally suggested; viz., by adding clarified neat's-foot or lard-oil to the collodion, instead of castor-oil, as directed in the *British Pharmacopœia*. This, it will be found, forthwith allays the pain of the blistering, and at the same time limits its effect to the circumscribed point to which it has been applied, which should hardly if at all exceed the apex of the pustule in extent.

It may here be useful to mention that flexile or elastic collodion has these singular and marked effects, not only in the instance now alluded to, but also in the case of burns and scalds, even with the strong mineral acids; so that I have constantly treated such injuries from the action of nitric acid, or from gunpowder, etc., by this method of varnishing with elastic collodion, or where the skin has been broken, by first covering the part with blotting-paper soaked in glycerine and water, to imitate the cuticle, and then varnishing with the flexile collodion, which procedure I have found, as in the case of small-pox, not only prevents the dreaded slough, but also promotes the healing of the part without mark or scar, and this in a shorter time than by any other method of dressing with which I am acquainted. But to return to the case of small-pox: after the blistering and collodion has remained intact for eighteen or twenty-four hours, a lotion, composed of starch and glycerine, plasma, as it has been termed, or glycerine jelly, may be applied two or three times a day by means of a flat camel hair-brush, so as thinly to cover the part and exclude the atmosphere and its drying effects.

Although I have mentioned the early periods of the eruption of small-pox as most advantageous for the prophylactic treatment indicated, yet it may be applied (of course with less chance of success) at any time during the eruption, except at the last or sloughing stage.

I could mention a few instances in confirmation of the advantages of this plan; but I will cite one only, the case of a Miss N., the daughter of a late physician. This young lady had several pustules of small-pox on the face and neck, as well as elsewhere. All those within sight were blistered and collodionised, save one near the ear, which was left by the wish of Dr. N. to test the process. In every case where the blistering was applied no mark of pustular slough remained; but on the selected spot, as on a few other places which were overlooked, there were most evident signs of the disfigurement of the disease, the marks of pitting remaining until this day.

It would be a source of much gratification to me if any of my *confrères*, either in this country or Paris, whose opportunities are greater than my own, would make trial of the foregoing method, and favour me or your readers with the results.

PROFESSOR FLOWER'S HUNTERIAN LECTURES ON THE COMPARATIVE ANATOMY OF THE MAMMALIA.

Delivered at the Royal College of Surgeons of England.

LECTURE XV.—Friday, March 18th.

OF the skull in the Rodentia, that of the Capibara, though presenting some peculiarities, may be taken as an example. The cranial cavity is comparatively small, and elongated; the temporal fossæ are small, and not distinctly separated from the orbits. A peculiar conformation in many Rodents is the enormous enlargement of the infraorbital foramen; this is seen in the Porcupine and the Cape Jumping Hare. In the Beaver and Hare, the foramen is of the usual size. There is a well formed lacrymal bone; the zygomatic process is developed from the maxilla; and the malar appears as a small bone suspended in the middle of the arch, and generally forming a part of the glenoid fossa, which is nearly always elongated from before backwards. The nasal bones are long and projecting. The præmaxillæ are large and bent down, and two large incisor teeth pass through them into the maxilla. It has been doubted whether these are true incisor teeth; but, in Mr. Flower's opinion, there can be no question about this, as they are originally developed in the præmaxillæ. The palate is narrow; and the front part, between the molar and incisor teeth, is contracted and rounded. The pterygoids are small and rudimentary. Tympanic bullæ are present. The tympanic and petrotic bones are ankylosed together. Large paroccipital processes are present in the Capibara. The hyoid apparatus is rather rudimentary. The anterior cornua are but slightly ossified; the thyrohyals are often ankylosed. The lower jaw has very small coronoid processes; the temporal fossæ are also very small. The parts about the angle of the jaw are much developed. Anteriorly, the bone is rounded, and supports the lower incisors. In the Spotted Cavy, the zygoma is much enlarged from above downwards, and in front is hollowed out into a great cavity, which communicates with the mouth. The Porcupine has the upper part of the skull enlarged by air-cells, which extend from the frontal bone to the occiput; the nasal bones are much dilated. The Cape Jumping Hare, the Chinchilla, Jerboa, and some other Rodents, have large bullæ at the posterior, upper, and outer angle of the skull, reaching to the upper part of the petrotic bone, above the tympanum. In the Hare, the face is placed at an angle directed downwards, as in the Sheep. The cavity of the skull is much contracted, especially between the orbits. The anterior palatine foramina are very large; and the bony palate is quite narrow.

A section of the skull of a Marsupial Animal—as the Thylacine—shows an inferiority of development. The brain-cavity, as compared with that of the Dog, is small; the three fossæ, cerebellar, cerebral, and olfactory, lie in a line, and are separated from each other by ridges. The nasal cavity is very like that of the Dog. Externally, the skull resembles that of the Dog; but at the base, in many Marsupials and in some Insectivora, are two large cavities between the palate and the maxillary bones. The tympanic bone is very rudimentary, bounding only a portion of the membrane and a part of the meatus; it never forms a bulla. Many Marsupialia, however, have large bullæ developed from the hinder part of the alisphenoid, which forms the anterior part of the tympanic cavity. In the Kangaroo, the alisphenoid runs under the tympanic cavity, and unites with the exoccipital. The angle of the lower jaw is curved inwards in all Marsupialia; some of the Monodelphia have a slight approach to this. The carotid canal perforates the basisphenoid very obliquely. The hyoid apparatus in the Marsupialia has some important characters. In the Thylacine, there is a lozenge-shaped basi-hyal, a pair of keratohyals, and a ligament on each side passing back to the skull; the thyrohyals are well developed. The hyoid apparatus is formed on this type in all the Marsupialia.

The skull of the Echidna among the Monotremata at first sight resembles that of a bird; the cranial cavity is round and large; and the face is long and narrow, and prolonged into a beak-like process. The surface of the cranium is very smooth; the bones are rarely ankylosed together. The orbit is small, and there is a distinct zygoma. The palate is flat, and extends a long way back. The posterior nares are very small. The pterygoids lie outside the palate-bones, and close in the anterior and inner side of the tympanic cavity. The tympanic bone is a very slender ring; the membrana tympani looks downwards. There is in the side of the skull an expansion upwards of the petrotic bone, which has been named by Mr. Parker the pterotic bone. There are no teeth in the Monotremata. The mandible has no ascending process; the coronoid process and angle are but slightly developed. The hyoid apparatus has the ordinary mammalian characters.