dislocation upward, temporarily, of the entire inferior turbinal, and its replacement after the antral disease has been removed. This, like anterior turbinectomy, is I am sure, quite unnecessary for the successful eradication of antral disease. Here, again, submucous turbinectomy is all that is needed, if the turbinal is excessive in size, preliminary to the antral surgery. If the redundancy of the turbinal is of a soft nature, galvano-cautery puncture is the best means of reducing it; and if the enlargement is of a firm consistency, submucous turbinectomy is the proper and best method, as the soft coverings of the turbinal are in this manner least disturbed, and are still left fit to perform their inestimable and essential functions.

The real test of successful surgical operative interference in the nose is, without doubt, to be ascertained by the answer to the question, How does the patient feel as regards freedom of respiration through and comfort in the nasal interior and pharynx six months afterwards? The most beneficent surgery is the most conservative as regards the preservation of the mucous lining, and is almost always attained by operating successively in stages, rather by what we might call physiological, than by severe, sweeping, sacrificial surgery.

REFERENCE.

¹ *Lancet*, May 4th, 1907.

ON

THE CONNEXION OF ENLARGED CERVICAL GLANDS WITH CARIOUS TEETH, ENLARGED TONSILS, AND ADENOIDS.

By H. OSBORNE, M.D., M.R.C.S., D.P.H.,

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THE subject of enlargement of lymphatic glands in the neck of the child is one of real importance, for, although in most cases the lowering of the general health associated therewith may be comparatively insignificant, yet the susceptibility of children with chronically enlarged glands to infection from trivial causes would seem to be well established, and in a considerable proportion of cases there ensue developments which seriously undermine the health or (when suppuration occurs) cause permanent disfigurement.

This little investigation being merely of a preliminary and somewhat crude character makes no pretence of shedding much additional light on the etiology of glandular enlargement. It merely presumes to supply a certain amount of statistical evidence as to the relation existing between "enlarged lymphatic glands in the neck" on the one hand and "carious teeth, enlarged tonsils, and adenoids" on the other hand. The numbers dealt with are comparatively small, and the results correspondingly liable to error.

In order to obtain the required statistics it was, of course, necessary to adopt standards of enlargement or disease; thus, three standards, "A," "B," and "C," were adopted in each condition, as follows:

Teeth A. No carious teeth present.
Teeth B. One to four decayed teeth present.
Teeth C. Above four decayed teeth present.

Similarly:

Tonsils A. No enlargement of tonsils.
Tonsils B. Moderate enlargement.
Tonsils C. Much enlargement (almost meeting).

Likewise:

Adenoids A. Adenoids (causing symptoms) not present.
Adenoids B. Adenoids causing moderate symptoms.
Adenoids C. Adenoids causing marked symptoms.

Again:

Glands A. Glands which are barely perceptible on palpation—roughly up to the size of a lentil.
Glands B. Moderately enlarged glands—roughly up to the size of a haricot bean.
Glands C. Enlargement beyond the size of a haricot bean.

The glands noted were those situated anterior to the sterno-mastoid muscle and those lying under the jaw, which could be readily felt when the head was moderately extended. Glands lying behind the sterno-mastoid muscle were disregarded.

The method adopted was to correlate the "A," "B," and "C" groups of glands with the "A," "B," and "C" groups in the case of teeth, tonsils, and adenoids, respectively.

This correlation was carried out in respect of four groups of children, as follows:

- I. 636 boys of 12 years of age,
- II. 551 girls of 12 years of age,
- III. 666 boys of 5 years of age,
- IV. 621 girls of 5 years of age,

making a grand total of 2,474 children.

The results of the correlation of glands with teeth, tonsils, and adenoids, are shown in tables of percentages.

On the evidence of these tables it would appear that the presence of decayed teeth, enlarged tonsils, and adenoids, are all associated with an increase in the percentage of children with enlarged glands, but, at the same time, this increase would appear to be much more pronounced in the case of tonsils and adenoids, and comparatively little in the case of carious teeth. For instance, the percentages of "C" glands occurring in association with "B" tonsils or "B" adenoids, are distinctly greater than the percentage of "C" glands with "C" teeth; and this holds good in each of the four groups of children.

Granted that the presence of either enlarged tonsils or adenoids is associated with enlargement of glands in the neck, we have still to consider whether such association is due to a general lymphatic hyperplasia involving both glands and other lymphoid structure, such as tonsils, or whether it is rather the catarrhal conditions to which tonsils and adenoids predispose that give rise to glandular enlargement. There is a third possibility—namely, that infecting organisms may obtain access more readily by way of enlarged tonsils and adenoids than through the healthy throat and nose.

These points might be cleared up by accumulating data bearing on:

- (a) The effect on glands of operation for tonsils and adenoids.
- (b) The effect on glands of catarrhal conditions co-existing with enlarged tonsils and adenoids, and comparing with the relation existing between glands and tonsils and adenoids without catarrhal symptoms, and so on.

It is proposed during the present year to go into these questions in as detailed a manner as time will allow.

TABLES SHOWING CORRELATION OF GLANDS WITH TEETH, TONSILS, AND ADENOIDS.

Teeth.	Tonsils.	Adenoids.
A=No caries.	A=No enlargement.	A=No adenoids.
B=1 in 4 carious.	B=Moderate enlargement.	B=Moderate adenoids.
C=Above 4 carious.	C=Marked enlargement.	C=Marked adenoids.

I.—12-Year-Old Boys (636 Examined).

Glands.	Number Examined.	Teeth.			Tonsils.			Adenoids.		
		A	B	C	A	B	C	A	B	C
A. Not exceeding size of a lentil	30	5.9	5.0	3.3	5.3	1.6	0.0	4.8	5.0	0.0
B. Up to size of a haricot bean	484	78.4	76.2	74.6	78.8	65.1	38.1	77.7	40.0	33.3
C. Beyond size of a haricot bean.	122	15.7	18.8	22.1	15.9	33.3	61.9	17.5	55.0	66.7
To'tals	636	100	100	100	100	100	100	100	100	100

II.—12-Year-Old Girls (551 Examined).

Glands.	Number Examined.	Teeth.			Tonsils.			Adenoids.		
		A	B	C	A	B	C	A	B	C
A. Not exceeding size of a lentil	49	16.9	8.8	2.5	10.7	0.0	5.3	9.2	0.0	0.0
B. Up to size of a haricot bean	418	71.8	76.7	75.3	77.8	74.4	36.8	77.4	41.2	0.0
C. Beyond size of a haricot bean	84	11.3	14.5	22.2	11.5	25.6	57.9	13.4	58.8	100.0
Totals	551	100	100	100	100	100	100	100	100	100

III.—5-Year-Old Boys (666 Examined).

Glands.	Number Examined.	Teeth.			Tonsils.			Adenoids.		
		A	B	C	A	B	C	A	B	C
A. Not exceeding size of a lentil.	28	9.75	2.4	2.4	4.5	2.7	0.0	4.95	0.0	0.0
B. Up to size of a haricot bean.	405	61.60	65.4	50.6	65.7	28.8	31.25	65.55	33.3	42.85
C. Beyond size of a haricot bean.	233	28.65	32.2	47.0	29.8	68.5	68.75	29.50	66.7	57.15
Totals	666	100	100	100	100	100	100	100	100	100

IV.—5-Year-Old Girls (621 Examined).

Glands.	Number Examined.	Teeth.			Tonsils.			Adenoids.		
		A	B	C	A	B	C	A	B	C
A. Not exceeding size of a lentil	51	14.1	7.85	3.7	9.3	0.0	0.0	9.1	0.0	0.0
B. Up to size of a haricot bean	420	60.9	71.15	64.7	70.7	50.0	29.4	71.5	33.3	0.0
C. Beyond size of haricot bean	150	25.0	21.00	31.6	20.0	50.0	70.6	19.4	66.7	100.0
Totals	621	100	100	100	100	100	100	100	100	100

Summary.

Glands.	Number Examined.	Teeth.			Tonsils.			Adenoids.		
		A	B	C	A	B	C	A	B	C
A. Glands not exceeding the size a lentil	153	11.8	6.1	3.0	7.3	1.1	1.4	6.9	0.5	0.0
B. Glands up to the size of a haricot bean	1,727	65.2	72.8	64.2	72.9	55.1	34.2	73.1	34.8	23.8
C. Glands beyond the size of a haricot bean	589	23.0	21.1	32.8	19.8	43.8	64.4	20.0	64.7	76.2
Totals	2,474	100	100	100	100	100	100	100	100	100

DR. ALEXANDER MILNE, of Aberdeenshire and York, left personal estate valued at £3,262, of which £630 is in Scotland.

AN exhibition of photographic prints in connexion with biological subjects was opened at the house of the Royal Photographic Society, 35, Russell Square, London, W.C., on Tuesday evening last. The exhibition will remain open until February 7th.

DRAUGHTS AND COLDS.

BY

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DRAUGHTS seem a particularly controversial topic. On the one hand they are hailed as "spirits of health," and on the other hand they are anathematized as "goblins damned." "*Aria di finestra colpo di balestra*" (the air of a window is like a shot from a crossbow), warns the Italian proverb, and we might coin a proverb—"Shut a window and open a grave"—to indicate the whole-heartedness of the opposite opinion.

There can be no doubt that up to quite recent years most hygienists and physicians held draughts in abhorrence. Harrington declares that "draughts which are productive of discomfort are more dangerous than ordinary vitiation of the air, and therefore complete ventilation with draughts is worse than partial ventilation without draughts"; and all systems of ventilation have aimed at purification of air without sensible air currents. Of late years the object-lessons presented by open-air sanatoriums have made many converts to the cult of the open window, but the fear of draughts is still prevalent in all classes of society, and to draughts are commonly ascribed about 99 per cent. of the colds that afflict humanity.

When we find two contradictory opinions so strongly held, we may be pretty certain that there are truth and falsehood in both, and that the pure truth lies somewhere between the two.

It is certain that many of the colds attributed to draughts are not due to draughts at all. The ordinary man assumes that draughts are the causes of colds, and unless he lives in a hermetically-sealed case he will always find a draught of which he can make a scapegoat. It is simply a case of the *post hoc ergo propter hoc* fallacy. Further, it is just in close and stuffy rooms, when the skin is warm and moist, that a draught is most readily perceived, and the cold ascribed to draughts in such instances is almost certainly due to the germs in the polluted atmosphere, and has nothing to do with draughts.

For these and other reasons one must be chary of accepting the ordinary statement, "I sat in a draught and caught a cold."

And yet a draught may under certain conditions be a potent factor in the production of a cold.

A draught is a concentrated current of sensibly cold air impinging upon a localized portion of the skin, and though it is plain that such a current of air cannot directly cause a cold, which is a bacterial disease, yet it is equally plain that it may be an auxiliary factor; for it may cool the blood to such an extent as to diminish the bactericidal activity of the phagocytes and the vitality of the cells which line the respiratory passages, and thus render the mucous membranes more vulnerable to the *Micrococcus catarrhalis* and other bacteria of colds. It is possible, indeed, as pointed out by Dr. Ringrose Gore, that the mucus itself in such cases loses its bactericidal power and becomes a nidus for the growth of the micro-organisms of catarrh.

We must admit that draughts may sometimes in this way be a factor in the production of colds. But be it noted they are merely auxiliaries unless they succeed in cooling the blood unduly; and unless certain germs be present they are quite ineffective.

This theory offers a *via media* between the two opinions; it inculcates draughts in a few cases, exculpates them in most instances.

It may be said that it is impossible to avoid chills, and that germs are always at hand, and therefore draughts are always dangerous, and must very frequently cause colds. But this is erroneous, for it must be remembered that a well-fed mammal has great thermogenic adaptability. Under ordinary healthy open-air conditions, the vaso-motor reflexes quickly respond to the stimulation of cold and contract the blood vessels so as to conserve heat. It is true that if a man live constantly in a moist, warm, still atmosphere, and if his skin be continually protected from the normal stimulation of cool, moving air—it is true that under such circumstances the skin reflexes, if unexpectedly called upon, may forget their business and respond sluggishly and inadequately to the stimulus of cold, and that