was struck, not only by the lessening of the pyrexia, but also by the relief credited by patients themselves to each dose of the remedy—much as one almost expects to hear of it in acute rheumatism. One surgeon, himself a sufferer, notes marked relief within twenty minutes (*Mid. Med. Miscel.*, No. 6).

Hormazdji recommends twenty-grain doses; and, having noted relief in fifty-seven cases of tonsillitis caused by cold and damp, concludes that such cases give the best results, and that, when the malady arises from bad air or drainage, it is less amenable. This seems reasonable, but is not exactly my experience. For instance, of a family of nine children living in a house too small for them, and defective as to drainage, five in succession got severe acute tonsillitis, several having a temperature over 103° Fahr., and nocturnal delirium, and all going on to more or less ulceration. The earlier cases got a calomel purge, small frequent doses of aconite and potash-chlorate, sulphurous spray, a benzoïn inhalation, and ice; later, iron; they were relieved within thirty-six hours, but all relapsed on the third day. It was only when the sixth child—a delicate one—was attacked, that I had become aware of this use of the salicylates, when I found him suffering with severe throat-symptoms like the others, I ordered, after his purge, five grains of the soda-salt every two hours in liquor ammoniæ citratæ. The boy, who expected the same illness he had seen his brothers and sisters go through, expressed, with surprise, relief from the first few doses, was free from pain in twenty-four hours, had a very slight patch of ulceration, and no relapse. (The above prescription, which I gave this patient, should form a clear colourless solution, which agrees well, but, when dispensed by some chemists, I have known it turn brown, and cause irritation and vomiting; for this I have no satisfactory explanation.) Since this note was written, some half-dozen other cases of ulcerative tonsillitis have shown similar good results with the same remedy; of course, when actual suppuration (quinsy) has occurred, equal relief will not be expected.

(2) N., a man nearly 70, with what he called "compressed gout", showed an inflamed and swollen great toe, and complained of characteristic burning pain and tension in it and in the whole foot. He had several attacks before, never so bad as this; and had no sleep for three nights; overworried lately, he had probably exceeded in sherry; he was thin, weakly, and subject to diarrhoea. I ordered a lotion containing salicylate, two drachms to eight ounces of water with one or two drachms of laudanum, to be applied warm on lint with oiled silk; also ten grains of the salt internally every four hours. The lotion arrived first, 9 P.M., and was applied at once; in ten minutes the pain was relieved, the patient went to sleep, and had a good night; the medicine was not commenced till next day. He kept in bed, as ordered, three days, and had no severe return; he went out too soon, and ten days after got a partial relapse, which yielded to the same remedy.

Another gentleman, also nearly 70, and long subject to irregular gouty attacks, got a sudden acute development of the malady in one finger and an elbow-joint, a slighter one in the big toe; for twenty-four hours, he objected to any local application, as too troublesome, and took iodide of potassium with magnesia, etc.; on the second day, however, he was glad to apply the salicylate lotion, and reported quick and marked relief from it. Since the date of these cases, similar ones have been recorded by other observers.

In a third case, of a young married lady with very marked gouty family history, the immediate cause of desiring advice was an eruption of lichen planus on one arm. A salicylate lotion, containing also a little prussic acid, suited this patient extremely well; though, in a more chronic case of the same kind, but with extensive systemic disturbance (as usually associated with this eruption), it proved of no more service than other remedies. Its specialty lies in relieving gouty and rheumatic joints, which it seems to do even better than the ordinary alkaline compounds.

THE CAROTID PULSE IN AORTIC INCOMPETENCE.

By JAMES T. R. DAVISON, M.D. Edin.,

Second House-Surgeon, Royal Southern Hospital, Liverpool.

ON feeling the pulse in the carotid arteries in a case of aortic incompetence, I accidentally found, one day, that there was a difference in the strength of the pulsations on the two sides. Since then, I have examined the carotid pulses in every case of aortic incompetence that has come into hospital, with the following result. Out of ten cases, in one group A, consisting of six cases, the right carotid pulse was distinctly stronger than the left; in another, group B, consisting of two cases, both were of the same strength; while in the third group C, consisting of the remaining two cases, the left carotid pulse was distinctly the stronger. In every instance the radial pulses were of equal strength.

The best method to examine a patient is to get him on to a chair, or if this be not possible, to make him set up in bed, his head being slightly reclined backwards; then to place oneself behind him, and feel the carotids about the lower level of the thyroid cartilage. It is necessary not only to use the same pressure, but also to keep the same relation between the fingers and the artery on each side; for if the artery be felt in front of the finger a different impression will be produced from that which is perceived when it slips to its side.

In trying to ascertain what was common to each group of cases, I found that neither the degree of ruptured compensation, the conditions of the pulse, the presence of mitral regurgitation, nor yet the degree of aortic obstruction could be identified with any of them. One condition appeared to distinguish the groups, and that was the relative size of the heart. The two cases in which the left carotid pulse was the stronger had the largest hearts. The two cases in which the pulses were equal had very large hearts. Of the six cases, in which the right carotid pulse was the stronger, four had hearts smaller than any of the preceding ones; one, whose heart I did not percuss before death, had a heart weighing only twenty ounces; and the last had a heart slightly larger than either in group B, but less than either in group C.

In health, the carotid arteries pulsate equally strongly, so that we cannot regard these differences which occur in disease of the aortic valves, as mere accidents, depending upon differences in the lumen of the arteries. And this is borne out by the fact that these differences of strength in the carotid pulses are subject to occasional variations in the same subject. I only had opportunities of examining a few of the cases on more than one occasion, and the variations observed were, that where the right carotid had been the stronger, it became of the same strength as the left; and where the left carotid had been stronger, it became of equal strength with the right. I never found that where either carotid had been the stronger, it ever became the weaker. Normally, when the left ventricle contracts, it sends forth its wave of blood into an aorta whose coats are distended by the blood-pressure within it. Therefore this wave, by simply increasing the blood-pressure, will act equally on each carotid. When, however, aortic regurgitation is present, immediately before the ventricular systole, the coats of the aorta and carotids are to a certain extent collapsed, and those of the right carotid more so than those of the left, because its axis lies more in a line with that of the aortic orifice, and thus the right vessel will be more fully emptied than the left during the diastole. When the ventricle now contracts, its wave will no longer act simply by increasing the blood-pressure, but has first to distend the walls of the partially-collapsed arteries. In effecting this, the wave goes straight up to the right carotid, but before it reaches the left carotid it loses a portion in distending part of the transverse arch. Thus the right carotid with each ventricular systole will receive more blood than the left. Hence the greater strength of the right carotid pulse, and this greater strength will be the more apparent to the touch; that the right carotid is more fully emptied than the left during the diastole. We have seen that this condition obtained in six out of the ten cases. When the heart is very much enlarged, it may drag down the ascending aorta with it, and, by so doing, will bring the axis of the left carotid more in a line with that of the aortic orifice, so that the axial relations of the carotids to the aortic orifice will be about equal on either side. Under these conditions, we would expect that the carotid pulses would be equal, and this is what we find in group B, where the hearts are very much enlarged. Again, in group C, where the hearts are still more enlarged, a more extended change in the axial relations of the carotids and aortic orifice may explain the greater strength of the left carotid pulse, while the variations occasionally met with may be due to temporary slight displacements of the heart, brought about by flatulence, etc. Whether this be the true explanation or not, the fact remains that differences in the strength of the carotid pulses are very common in aortic incompetence. This fact is important as an aid in the diagnosis of this disease, but chiefly as a possible source of fallacy in the diagnosis of aortic aneurysm.

A CORRESPONDENT of a contemporary draws attention to the unsatisfactory method in which dust is collected in the City. He writes, "Coming down Broad Street every morning about nine o'clock, after inhaling the invigorating air of the suburbs, one finds the salutary effects of such inhalation sadly deteriorated by clouds of dust scattered in all directions by the employés of the City dust contractor in clearing the deposits from the several houses—which, I may add, are in boxes placed at the edge of the kerb, to the imminent danger of foot-passengers." These practices, which are as unsanitary as they are unpleasant, certainly merit the attention of the National Health Society, or some similar body.