

due to its appearing much later this year, and to the absence of the very cold weather that accompanied the epidemic in the early part of last year. Out of 160 cases of influenza in my practice this year, pneumonia occurred in but six cases, and of these only one presented the features and ran the course of ordinary classical pneumonia. The other five corresponded more to hypostatic or congestive pneumonia, with imperfect dulness of both bases, but a light crepitation, and a large area over which no breath sounds could be heard. With one exception they all ran a protracted course, with great prostration and considerable delirium, and in the case of two the diagnosis between influenza-pneumonia, and typhoid fever was for some time doubtful. There is no doubt that a slight degree of pleurisy complicated a large number of cases, but in a severe and extensive degree it occurred only in 2 per cent. of my cases.

On the whole, comparing the epidemic of this year with that of 1890, I would say, from my personal experience, that it was very much more widespread, that severe chest complications were much rarer, and, in proportion to the number attacked, the mortality was considerably less. Of those attended during the last epidemic, two died of pneumonia, one of acute bronchitis, one of convulsions, and one from syncope following severe sloughing of the tonsils and persistent vomiting. The mortality in the cases of uncomplicated influenza was *nil*. This compares very favourably with my mortality returns for the epidemic of 1890. The death-rates in all the towns visited by influenza show a high rate of increase, but in no town has the increase been so marked as in Sheffield. At first sight this was hardly to be expected, for the expanses of moorland that surround it have always been looked upon as favourable to the health of the town. The immediate explanation seems to me to be contained in the fact that the normal death-rate from diseases of the respiratory organs is in Sheffield higher than in most other large towns. In the year 1889—that is, before the first epidemic of influenza—the death-rate from diseases of the respiratory organs (not, of course, including phthisis) was 4.45 per 1000—a rate, as far as I can make out from examination of the annual reports, considerably in excess of the rate of mortality from the same causes in most of the other large towns. When we remember that influenza has mainly been fatal through its effects upon the organs of respiration, the high rate of mortality during the epidemic in Sheffield, exceeding as it did in one week over 70 per 1000, is not to be wondered at. To explain the unusually high death-rate from pulmonary diseases, it will not suffice to point to the influences of special trades in the town; for, owing to the introduction of machinery and the comparatively little dry grinding now done, cases of grinder's phthisis are rare. What seems to me the most probable explanation is the situation of the town itself. It is built along the bottom and up the sides of a series of valleys that converge towards the centre of the town. Under such conditions the air is not continually changed as it would be in a town built on an open plain, but the currents move sluggishly in the valleys between the hills. This condition is further aggravated by the circumstance that the large works that create most of the smoke are situated to the east of the town, and during the spring months the wind blowing persistently from that quarter carries with it dense masses of smoke, which become imprisoned in the valleys and hang like a thick pall over the lower quarters of the town. Under such circumstances one can easily imagine how infection, when once introduced, cannot easily be dissipated and gains a maximum of intensity.

Since writing the above my attention has been called to an address delivered by Dr. Gairdner before the Glasgow and West of Scotland Branch of the British Medical Association on Jan. 23rd, 1890, in which he alluded to an article which appeared in the *St. James's Gazette* of Jan. 21st, in which its writer points out that both in London and on the Continent the growth of epidemic influenza had been accompanied and preceded by unusual stillness of the atmosphere, and that its decline had been coincident with, and very probably due to, the replacement of stagnation by movement. Further, M. Descroix, of the Mont Souris Observatory, calls attention to the fact that during the last four months of 1889 there was very considerable stagnation of the air; whilst at Greenwich the aggregate horizontal movement of the air for this period was 5846 miles below the average of the last sixteen years. The week during which the epidemic established itself in London was a particularly stagnant one. On Jan. 5th

there was a gale, followed by a strong wind all the week, and another gale on the 10th. During that week the epidemic began to abate, and its continued decline was accompanied by windy weather.

Sheffield.

## REMARKS ON INFLUENZA AND ITS COMPLICATIONS.

BY EDWARD A. PIGGOTT, L.R.C.P. & S. EDIN., &c.

DURING the months of April, May, and June of the present year I have had a considerable number of cases of the disease known as influenza under my care, and as there has been much discussion both as to the nature and nomenclature of the disease, these remarks may not be out of place. The term "influenza" to my mind conveys a very imperfect description of the disease—a disease which assumes such variable symptoms. "Epidemic catarrhal fever" is without doubt the most scientific definition in vogue in this country, but even this is far less expressive than the French nomenclature—viz, *la grippe*—the extreme suddenness of the attack eminently justifying such a designation. Some short time since, a correspondent to THE LANCET suggested that the disease should be called "epidemic pneumonia," a term applicable to a great number of cases one meets with in an epidemic of so-called influenza; but pneumonia is not by any means a general complication of the affection. There is doubtless more or less tendency to chest mischief in almost every case of specific influenza, but certainly only a small percentage of the cases could be termed "pneumonia."

One peculiarity of the disease appears to be, that the height of the temperature, as measured by the clinical thermometer, bears little or no relative value in diagnosing a severe attack. The mercury may, at the onset of the disease, reach 104° or even 105°, which circumstance in the exanthemata would lead one to suspect the case to be of a serious nature: but in influenza, in twenty-four hours or less, it has fallen almost to its normal standard. I have had one or two cases where there was a persistent rise of the mercury in patients of advancing age and subject to chest and laryngeal affections. In these instances the disease appeared less amenable to treatment, and the nervous depression and bodily prostration were most apparent. The epidemic assumed a type of much greater severity in this district during the months of May and June than at any previous period. In 1890 the cases seemed altogether of a milder character and more widely scattered. The outbreak was announced by the appearance of a few sporadic cases in the month of April and early part of May, soon to be followed by a most decided epidemic, which in several instances attacked every member of a household. The general type or case was influenza pure and simple, but amongst the number were several which exhibited a more or less unusual train of symptoms, inclusive of the following.

CASE 1.—J. G. H.—, aged about forty-two, male, had occasion to drive a distance of eight miles in an open dog-cart on June 9th, without an overcoat, contrary to his usual custom. On the evening of the same day he was seized with a distinct rigor; and the following morning, after passing a restless night, the pulse was 130, temperature 104.2°, tongue furred, bowels constipated, with well-marked muscular pains in the back and limbs; there was anorexia, with a feeling of nausea and pain at the epigastrium, slight cough, with a sensation of constriction across the chest. He was confined to bed, linseed poultices applied, and a saline expectorant mixture prescribed. On the morning of the 11th my attention was called by the patient to the condition of the urine, which from its "smoky" appearance alarmed him. Upon microscopical examination I found numerous blood-discs and epithelial casts; heat and nitric acid demonstrated a large percentage of albumen. The pulse and temperature remained high; bowels obstinate, for which an aperient was administered; the diet consisting of beef-tea, milk, soda-water, &c.—12th: General improvement.—13th: The acute symptoms had so far subsided that the patient was able to leave his bed and take exercise in the garden. From this time the quantity of albumen in the urine gradually diminished, the kidneys resuming their normal action. Convalescence was uninterrupted, though

slow. I may add that there was no previous history of renal disease.

CASE 2.—A child (male) aged one year and ten months was, on June 9th, suddenly taken ill—as the parents supposed, in a “fit.” The boy, a robust healthy-looking little fellow, was upon my visiting him completely unconscious, with stertorous breathing, the conjunctival reflex being entirely absent. Temperature 105°; pulse 140. Ordered a warm bath, with mustard plaster to the nape of the neck; to take two grains of calomel on the tongue, and, when able to swallow, a mixture as follows: two grains of bromide of ammonium with five minims of aromatic spirit of ammonia, every two or three hours. 10 P.M.: Temperature 100°; pulse 120. Recovered consciousness, but very restless; bowels relieved; conjunctivæ injected.—10th: At 10.30 A.M. the temperature and pulse were normal, and the little patient had practically recovered.

CASE 3.—C. W.—, aged forty-four years, wheelwright by occupation, was taken suddenly ill on May 19th. He had sharp pains in the back and limbs, intense headache, with vomiting of bilious matter; the conjunctivæ were injected and insensitive, with stertorous breathing. Pulse 120, very weak; temperature 103°. Upon attempting to get to bed he had fallen on the floor in the above condition. Four grains of calomel were ordered at once, and strong mustard sinapism to be applied to nape of neck.—20th: Slight improvement as to nervous symptoms. Sufficiently recovered to take nourishing liquid diet; pulse and temperature remaining high. The case proved one of a most lingering character. The patient, after being confined to bed for three weeks, was unable to resume his employment until the end of five weeks from the date of attack. On July 21st the subject of these remarks went to work as usual, but had scarcely commenced his employment when he complained of feeling ill. He vomited some bilious matter, and went into the house with the intention of lying down. Some fifteen minutes afterwards he was discovered dead in his chair. The cause of death was unfortunately not verified by post-mortem examination. In the absence of such it is natural to suppose that an attack of syncope caused the sudden extinction of life.

As regards treatment, I found in the majority of cases that a simple saline expectorant, with nourishing and stimulating diet, were all that was required, together with the assiduous application of hot linseed poultices to the chest, which, I feel satisfied, saved many of my patients from bronchial complications.

Clare, Suffolk.

## ON SOME EXCEPTIONAL CASES OF OPERATION FOR CATARACT.

By W. J. COLLINS, M.S., M.D., B.Sc. LOND., F.R.C.S.,  
OPHTHALMIC SURGEON TO THE NORTH-WEST LONDON HOSPITAL,  
AND ASSISTANT SURGEON TO THE ROYAL SOUTH LONDON  
OPHTHALMIC HOSPITAL, ETC.

THE following five cases of operation for cataract I have selected as exhibiting certain features of exceptional character which appear to me to be suggestive or instructive:—

CASE 1. *Dislocated lens becoming cataractous; successful extraction without iridectomy or loss of vitreous; good vision; subsequent retinal detachment; recovery, with good vision.*—Mrs. Mac L.—, aged sixty, in 1885 sustained an injury to the right eye with a stone. On consulting me on March 18th, 1886, she was found to be suffering from dislocation downwards of the right lens. The lens was then nearly clear throughout; there was iridodonesis; no cyclitis or increased tension; vision  $\frac{3}{25}$ . In November of the same year the lens had become partially cataractous, and though there was no pain the partial vision was troublesome and distressing. I advised extraction when the lens was completely cataractous, at the same time warning her of the possible failure to effect a successful extraction owing to the dislocation. On May 20th, 1887, the cataract was ripe, and under cocaine I proceeded to extract. I avoided the use of a speculum. After completing the section (a sclero-corneal one) the upper arc of the iris exhibited slight eversion showing uvea; on inserting iridectomy forceps it was evident that the hyaloid was ruptured and vitreous just presenting in the wound. I immediately withdrew the forceps, and, discarding an iridectomy, passed

a fenestrated spoon through the pupil behind the cataract (which appeared very deep as the patient lay on her back), and successfully delivered the entire lens. No vitreous escaped, and no prolapse of the iris occurred. Healing took place without any complication, and one month later vision with right eye =  $\frac{5}{60}$  c. + 10 D. sph. + 2 D., cylindrical axis 10° down and in; and J. 1, c. + 15 D. and cylinder. Ten days later, having returned to the country, and having resorted to the undesirable pursuit of spudding thistles on the lawn, which necessitated stooping, I learnt there had been sudden partial loss of vision in the right eye. On her return to town I found the eye looking well; no iritis, no iritic prolapse, pupil nearly central and clear; but I found detachment of the retina over the outer and lower part of the fundus, and commensurate scotoma. The detached area gave a luminous projection, correspondent with its extent, in the dark. Absolute rest, dry cupping, and purgation, and the use of spectral green glasses, were followed by complete restoration of vision and subsidence of the detachment.

CASE 2. *Morgagnian cataract; other eye blind; escape of fluid cortex on capsulotomy; subsequent couching of nucleus, with restoration of vision.*—Isaac A.—, aged sixty-six (admitted to the London Temperance Hospital), a labourer from Wiltshire, had undergone cataract extraction for the right eye at another hospital some years previously. Iritis had followed, and the pupil was closed by synechiæ to relict capsule; tension minus and vision bad p.l. The left eye presented an apparently ordinary though unusually pearly-white cataract, opaque up to anterior capsule; pupil active, tension normal, and vision = p.l.—Oct. 31st, 1890: I proceeded to operate under cocaine with a view to extraction of cataract from the left eye. All went normally until the capsulotomy, when an unusually large escape of milk-white fluid cortex occurred, reducing the capsular contents to certainly less than one-half. The usual curette manipulations failed to effect the delivery of the opaque nucleus, which fell back, owing presumably in part to antecedent rupture of the hyaloid for vitreous presented at once. In view of it being practically his only eye, and not having a suitable scoop at hand, I elected to close the eye, having secured absence of entanglement of the iris and coaptation of the edges of the wound. There was no inflammatory reaction, and a fortnight later there was clear coloboma upwards; but the opaque nucleus was opposite the central portion of the pupil and movable with ocular movements, but only to the extent of very slight excursion; tension  $-\frac{1}{2}$  V. p.l. I opined that any further operation which should require lineal corneotomy and aqueous and possibly vitreous escape would be unadvisable and probably disastrous, and therefore decided to couch the nucleus. Four weeks later, under cocaine, I couched the nucleus through the cornea, effecting reclinatio rather than declination, a remaining hinge-like attachment to the suspensory ligament below assisting this manoeuvre by way of fulcrum. No irido-cyclitis or pain followed; and with appropriate glasses the patient could, three weeks later, and can still, read J. 10, and can go about by himself, which he had not been able to do for ten years.

CASE 3. *Double cataract; large innominate and aortic aneurysm; extraction (both) uncomplicated; excellent vision.*—Emily B.—, aged fifty-three, was admitted to the North-West London Hospital on March 21st, 1887, with mature cataract in left eye, and advancing cataract in right. There was good p.l. in left, and pupil was active and tension normal; the vision of the right was reduced to that of large objects and J. 20 type. The patient was found to present a large aneurysm occupying the arch of the aorta, the innominate, and the first portions of the right subclavian and carotid arteries. She suffered from attacks of angina pectoris and from orthopnoea.—March 23rd: Modified linear extraction, with iridectomy performed on left eye. No complication.—April 13th: Vision, left eye  $\frac{6}{60}$  c. + 10 D.  $\frac{6}{15}$ , and J. 1, at 20 cm. c. + 15 D.—July 4th, 1888: The right cataract having become mature, I extracted it under cocaine; there was a moderate posterior staphyloma of this eye, but her vision after the operation was J. 1 at 22 cm. \*

CASE 4. *Sudden movement during iridectomy under cocaine causing tearing away of major portion of iris; subsequent extraction of cataract under chloroform, with excellent vision.*—Mrs. J.—, aged sixty-five, with mature cataract of right eye, and immature cataract (preventing ordinary reading) of left eye, was placed under cocaine on Oct. 24th, 1887. An assistant held the eye with fixation forceps preparatory to the iridectomy; the moment the iris was seized