with unerring regularity. This he had done for many years when I became acquainted with him. He never increased the quantity, nor had he done so for several years; he showed no signs of degeneration, mental or physical, nor anything suggestive of a pernicious habit. It must be in the experience of old residents in India to have met with similar cases.

It seems to me that this crusade against opium, though well meant, is not reasonable. It is as unfair to argue from the *habitués* of opium smoking houses, as it is from the frequenters of gin palaces and other haunts, where the most degraded forms of alcoholic abuse may be met with in our own country. Both, in extreme cases, are an evil; but the moderate use either of alcohol or opium must be left to the discretion of those who feel called upon to take them.

There is another drug which is also in frequent use in India, the hemp (*cannabis*), which is infinitely worse than opium. I find no objection taken to this drug by the anti-opium party. I can see no medical ground that would justify violent interference with the custom in question. Control and limit the abuse of opium, but to interfere with and suppress it altogether seems to me unjustifiable.

I know no reason why opium should be interfered with and alcohol be exempt. The evils of the one are far inferior to the evils of the other, and the moderate use of both—as I have said—should be left to the discretion of those who want them. It seems to me to be clearly proved that the moderate use of opium is not attended with the evil results ascribed to it, though, as with alcohol, a certain number of persons will abuse it. I repeat, therefore, that on medical grounds I see no reason for advocating the abrogation of the present regulations concerning opium in India. I confine myself entirely to the medical aspect. Other and convincing reasons for maintaining them have been ably advocated elsewhere.

OPIUM AS A PREVENTIVE OF AGUE.

BY SURGEON-GENERAL SIR WILLIAM MOORE, K.C.I.E.,
Honorary Physician to the Queen.

On several occasions when I have mentioned that opium is preventive as well as curative of so-called malarious fever the statement has been doubted or even contradicted.

Without quoting ancient authors or writers of the early part of the century, I might cite scores, lay and medical, who, since the time of Surgeon O'Shaughnessy (1853) up to the evidence given recently before the Opium Commission in Calcutta by Surgeon-General Rice, have regarded opium as a preventive of fever. There is also a widespread impression in many parts of India that opium not only protects from fever but also prolongs life. A similar belief has also prevailed in the fen districts of this country. In my own experience I have known opium consumers alone remain free from fever when most others suffered during extraordinary malarious seasons. And as servants in India I preferred opium users, they being less liable to get sick from exposure on the march or when taken into the colder climates of the hills.

The opinions of so many persons which might be quoted, and the widespread belief in the power of opium as a preventive of ague cannot be ignored; more especially as one of the constituents of opium, namely, narcotine, has been proved to be an antiperiodic.

Now how does opium act as a preventive? Opium (I especially refer to smoking) in small quantities excites the circulation, and produces a glow throughout the whole system. In large quantities, it soothes the system and blunts nervous sensibility. Both actions are antagonistic to chill, and chill is the first stage of malarious fevers, especially of ague. The Indian, after working and perspiring all day under a tropical sun, is very likely to become chilled by the night fall of temperature, and this liability is increased by his carelessness in not using extra garments. But he comes home, and after, or sometimes before his evening meal, he takes his opium. As a consequence, instead of feeling cold and shivering, he remains warm and glowing, and so escapes chill, which, if not the real and only cause of malarious fever, is certainly the cause of many repetitions of attack.

From recent Indian newspapers, I learn of a great increase

of malarious fever in certain parts of India. Naturally the question presents, Is this due to the abolition of opium shops, and to the limitation of the possession of opium per person to one tolas weight, rather less than half an ounce?

CLINICAL LECTURE UPON HARE-LIP AND CLEFT PALATE.

BY THOMAS ANNANDALE, F.R.C.S.,
Regius Professor of Clinical Surgery in the University of Edinburgh.

I PROPOSE to-day to make some concise clinical remarks upon hare-lip and cleft palate, and to illustrate the subject by bringing before you several cases of these deformities.

Taking the notes of only the last sixteen years of my hospital work, I find that I have treated during this time 236 cases of hare-lip and cleft palate, and in addition to these many other cases have been under my care in private practice. The remarks, therefore, which I now offer you are founded upon well-matured experience.

Deficiencies, or clefts, in the lips and palate are occasionally the result of injury or of ulceration or sloughing, but true hare-lip and cleft palate are congenital deformities or deficiencies.

HARE-LIP.

This deformity is one of the upper lip, but fissures (usually median) have been met with in the lower lip in a few instances, and in rare cases a fissure has extended upwards through the cheek, along the side of the nose, or across the cheek towards the ear.

Hare-lip may, or may not, be complicated with a fissure of the alveolar margin of the upper jaw, or with a fissure of the palate in a part, or whole, of its extent. Various degrees of hare-lip are met with, and the cleft, or clefts (in the double form) may only affect a portion of the lip, or may pass through its entire extent and open into one or both nostrils.

VARIETIES.—I. "SINGLE" HARE-LIP.

(A.) Uncomplicated.

(B.) Complicated with a fissure through the alveolar margin, with a fissure of the palate, or with both.

In single hare-lip the cleft may be situated upon one or other side of the middle line, but is much more frequent upon the left side. When the alveolar margin of the jaw is fissured, one edge of the fissured bone usually projects more or less and may overlap the other edge.

In connection with fissures through the alveolar margin in single and double hare-lip and in cleft palate it is to be noted that the exact situation of the fissure varies. In single fissures the line of the cleft may be at a point corresponding to the junction of the intermaxillary with the superior maxillary bone, the canine tooth on the corresponding side forming the external boundary of the fissure, or, as is more frequent, the line of the cleft is bounded externally by an incisor tooth ("precanine" tooth) which lies between the cleft and the canine one. In double fissures of the alveolar margin the position of the clefts is similar, there being in a considerable majority, a "precanine" tooth between the canine and cleft. In a few cases it has been observed that a "precanine" tooth existed in connection with one of the clefts but was absent in the other.¹ In both single and double clefts the number of the incisors may be diminished or increased.

II.—DOUBLE HARE-LIP.

This condition occurs without any separation of the intermaxillary bones, but most frequently it is complicated with a double fissure of the alveolar margin. A fissure of the palate may or may not be present. The central portion of bone ("intermaxillary bones") is displaced to a varying extent. In some instances it projects very markedly and it may stand out from the superior maxilla at an angle almost approaching a right angle. Its neck of attachment to the jaw varies in breadth in different examples of the deformity. The soft tissues covering the central portion of bone are continuous with those of the septum of the nose, and in cases of com-

¹ See an important paper by Professor Sir William Turner, *Journal of Anatomy and Physiology*, vol. xxix.

plete fissures into the nostrils, they are entirely cut off from the rest of the lip, and, therefore, receive their principal nourishment through this connection with the septum. This fact must be remembered when dissecting off these soft tissues from the central portion of bone in operating for double hare-lip, and great care taken to keep the sharp edge of the knife towards the bone so as to avoid injuring the vessels, which, passing from the tissues of the septum, are required to nourish the separated flap.

Cases of double hare-lip are occasionally met with in which the fissure is complete and opens into the nostril upon one side, the fissure upon the other side not being complete.

TREATMENT OF HARE-LIP.

Infants affected with this deformity may not be able to take nourishment from the breast or feeding bottle, and if they are not able to do so proper nourishment must be administered by some modification of the feeding bottle or by the spoon until the time for operative interference is advisable.

OPERATION.

Age for Operating.—Cases of hare-lip may be operated upon at any age after birth, but the operation should never be performed unless the child's condition is satisfactory. Delay will not interfere with the good result of an operation, but there is always some risk of operating in the case of a feeble or ill-nourished patient, and in such patients a good union of the wound is not always to be depended upon. I myself prefer to operate at the age of from 3 to 5 months, always provided that the patient's general condition is good; but should the condition of health be bad, I always advise postponement of the operation until the health be favourable. Should both hare-lip and cleft palate be present, it is best to operate upon the lip first and delay the operation upon the palate until the child is from 2 to 5 years old, according to the extent of the fissure. Should the child be more than 4 years old, I advise operating upon the palate first, and then closing the fissure or fissures in the lip as soon after as convenient.

Principles of Operating.—These may be considered under the following heads.

A. Paring or Rawing the Edges of the Cleft or Clefts.—Various incisions have been suggested for this purpose, and although I admit that some of these procedures, including splitting of the tissues of the lip, may in particular cases be usefully adopted, my general practice is to pare freely the margins along the whole length of the cleft by incisions carried directly downwards, parallel to and outside each edge of the cleft, and so completed that the rounded corners of the cleft at the labial margin are removed. In this way the pared edges of the cleft are converted into two straight surfaces, which, when carefully brought together, should present no notch or hollow at the labial surface. In cases in which the lip is deficient owing to a wide cleft, and in aggravated cases of double hare-lip, the slices, or a portion of them from one or both edges of the cleft, may, instead of being entirely removed, be left attached at the labial margin, turned downwards, and their raw surfaces brought together so as to form a projection at the labial margin, and prevent any notch or cleft remaining. If this projection be excessive it can be at any time curtailed. When the nostril is much flattened or displaced, in either single or double hare-lip, I have always rawed the inner surface of the outer wall of the nostril and the opposing side of the septum for some little distance up, so that these surfaces may be brought together. If this is not done an opening between the nostril and under surface of the lip may remain.²

In double hare-lip the incisions should be carried along the outer edges of the fissure, as in single hare-lip, and the process of skin covering the central portion of bone should have its edges incised so as to leave a V-shaped flap, which flap should then be dissected up from the bone, its continuity with the skin of the septum being carefully preserved. When the tissues of the lip are deficient in double hare-lip, and the edges of the wound cannot be brought together without tension, the tension may be relieved by carrying an incision

round the base of each ala of the nose; these incisions should start from the upper end of the rawed lateral edges of the cleft.

B. Divide the surrounding attachments of the lip to a sufficient extent, so as to allow the pared edges to be brought together without tension. In single hare-lip with a displaced and flattened nostril I have found great advantage in separating these attachments only upon the one side—that of the flattened nostril—leaving the other half of the pared lip attached to the jaw. In this way a fixed point is retained, to which the other freely separated and pared portion of lip and nostril can be connected and held in position.

C. Relieve Alveolar Projections or Displacements.—If, in single hare-lip, one edge of the alveolar cleft be prominent, an endeavour should be made to bring it into position by bending it over with strong forceps, and in a few cases I have found that making a slight notch with a fine saw through the alveolar margin at a point about 1 inch external to the cleft assisted in bringing the displaced bone into position. Should the projecting bone overlap the other margin of the cleft, or be too large to fit into the cleft when brought towards it, it must be diminished by sawing or clipping off a portion of it. When this is required, the other surface of the cleft may also be rawed, and the two edges of mucous membrane sutured with one or more catgut sutures. In double hare-lip an attempt should be made to force down into position the central portion of projecting bone, the soft tissues over it having first been dissected up from it, and left attached to the septum, as already mentioned. In the large majority of cases the central portion of bone is too wide and too long to fit properly into the alveolar cleft, and in such instances it should be trimmed by saw or forceps, so as to make it of proper size and shape to do so. If the projecting bone is much displaced, or its neck of attachment is very narrow, it is best to divide the neck close to the septum of the nose, and take away this bone altogether, saving, however, the soft tissues over it to assist in filling up the cleft in the soft textures.

D. Bring carefully together and retain by proper sutures the rawed edges of the cleft or clefts. These edges may be brought together and secured by various forms of suture, but I prefer pliable silver wire stitches, and usually introduce three of these, one close to the nostrils, one through the centre, and one through the labial margin of the lip. Between these one or more superficial stitches of horsehair should be inserted, and great care taken that the edges of the skin are not turned in, but are secured so that raw surface is in apposition with raw surface. In double hare-lip the upper wire stitch should pass through both edges of the rawed cleft and also through the subcutaneous tissues of the base of the V-shaped flap; the second stitch should also pass through both rawed edges of the cleft and through the subcutaneous tissues of the apex of the same flap, and the third wire stitch should pass through the labial margin of the cleft only, and should not include the central flap. When these stitches are adjusted in cases of double hare-lip, it will be found that the septum of the nose is drawn down towards the lip, causing the point of the nose to be much flattened. This flattening soon disappears, and the nose gradually rises up again. In aggravated cases of double hare-lip it has been suggested that the operation should be performed at two or more stages, one side being first operated upon, and the other side closed at some future time. Having practised this procedure, I can with confidence recommend it in suitable cases.

Delayed Union.—Should the wound in any case of hare-lip not heal soundly or be torn open by accident, the edges may be at once brought together again, being first rawed by scraping or incision, if necessary, and if a cleft or notch at the labial margin result after any operation for hare-lip, a secondary operation for its relief may be performed at any convenient interval.

TREATMENT OF HARE-LIP AFTER OPERATION.

In all cases careful feeding of the patient by means of a spoon must be attended to. The stitches are to be divided and removed at a date of from four to eight days after the operation, according to the healing of the wound. It is often advisable to divide, but not remove, one or all of the wire stitches upon the fourth day. If left in position after being

² Since writing this I have read an interesting paper by Mr. W. Thomas, of Birmingham, in which he advocates, but in a more complete form, the stitching of the displaced nostril to the septum.

divided, they will still act in keeping the edges of the wound together, and their division relieves tension and prevents ulceration. The horseshair stitches may be retained for the full eight days.

When the stitches have all been removed, one or more strips of plaster should be applied across the lip and cheek, so as to keep the edges of the wound from separating, and also to prevent the cicatrix stretching. This plaster should be retained for three weeks or a month, as undue stretching of the cicatrix usually leaves a wider and more perceptible mark.

One more Hint.—When there is considerable tension after an operation for hare-lip, owing to the wideness of the cleft or deficiencies of lip tissue, the nostrils may be obstructed, and the lower lip being sucked into the mouth like a valve during respiration, the breathing may be seriously interfered with, and, therefore, such cases must be carefully watched for the first twenty-four hours after the operation, and the lower lip kept from being thus drawn in.

CLEFT PALATE.

True cleft palate is a congenital deformity, which may or not be associated with some form of hare-lip. Degrees as to the extent and width of the fissure are met with, and it may involve a portion only or the whole of the soft palate, or the whole soft palate with a portion or the whole of the hard palate. In many cases the hard palate is more or less highly arched.

Treatment.—Congenital fissures of both soft and hard palates may be treated by the application of plates or artificial soft palates, but the closing of them by operation is more satisfactory, provided the patient's condition admits of the operation.

Age for Operation.—If the fissure is confined to the soft palate the operation may be performed at the age of 2 years or even earlier—I prefer the child to be at least 2 years; but when the hard palate is involved I am of opinion that the operation should be delayed until the patient is 5 years or older.

PRINCIPLES OF (OPERATING.

A. Pare the Edges of the Whole Fissure Freely.—In the soft palate this paring can readily be done, but in operating upon the hard palate it may happen that the edges of the flaps of soft texture may after their separation from the bone not be thoroughly rawed, and may therefore require a further paring.

B. Loosen Surrounding Soft Tissues by Incision and Separation.—When the fissure is confined to the soft palate this may not be required, but if there is any tension in bringing the rawed edges together, an incision through the mucous membrane and submucous tissue made parallel to and about half or three-quarters of an inch external to the fissure upon each side will suffice to relieve it. If tension still exists after this procedure any tight muscular fibre may also be divided. When the hard palate is involved I still advocate the procedure which I first practised in 1864, an account of which, with illustrated cases—the first cases successfully treated in Scotland—was published in the *Edinburgh Medical Journal* for January, 1865. This procedure consists in first paring the edges of the fissure, making an incision on each side close to the gum, and extending from the canine tooth to the last molar and round it, if necessary, and then separating with a periosteal elevator all the soft textures, including the periosteum, from the bony palate, leaving them only attached in front and behind where the palatine vessels enter. In this way the pared soft textures forming the two edges of the fissure can be slid together without tension and sutured. In the same paper I advised that the entire fissure in both hard and soft palates should be united at one time, but cases are occasionally met with in which the soft palate is deficient, and if in such cases the hard palate is involved, it is better to close the fissure in the hard palate only, and supplement the deficient soft palate by a soft rubber artificial one.

C. Suture the Pared Edges in Position.—Horseshair or silk-worm catgut sutures may be used, but when the fissure involves the whole of the soft palate or hard palate, I employ two or more silver wire sutures with intermediate sutures of horseshair. It is always well to insert a silver wire suture at

the point where the hard and soft palates join, for the wound here not infrequently gives way a little unless its edges are properly rawed and kept firmly in position by a rigid suture.

Position, Anesthesia, etc.—When operating upon cases of cleft palate, I always have the patient thoroughly under the influence of chloroform and resting upon his or her back, with the head lying over the edge of a table. This position does much to prevent the blood—which often at first flows freely—passing down into the pharynx or air passages. A Smith's or other efficient mouth gag is a very essential aid in performing these operations, and should always be used. As some blood must pass down into the stomach, and may, afterwards, be either vomited up or passed by the bowel, it is well to warn the friends or attendants of the patient that this may occur.

AFTER-TREATMENT.

The principal points to be attended to are to feed the patient with fluid, and soft but nourishing food, such as milk, eggs beat up in milk, and soups, to wash or syringe out the cavity of the mouth several times daily with some mild antiseptic lotion, such as boracic acid solution, and to limit the amount of speaking as much as possible.

The stitches should not be removed for from two to three weeks after the operation according to the amount of healing of the wound. Some of them usually become loosened, and can then be removed, and it is quite common for one or more of them to give way, leaving a gap. If this gap is not extensive, it gradually contracts and heals, but if an opening becomes permanent it may be closed by the application of a hot wire, or if of some size, by a second operation.

After successful operation for cleft palate, the speech may, for a time, not be much improved, but it always is favourably altered, and the patients find that they can speak with more ease. Careful education in speaking and pronouncing words will much aid in improving articulation.

In conclusion, I may state that, having from time to time been consulted by adult patients suffering from congenital fissures of the hard palate, as to the possibility of improving their speech and making them more fit to take part in public positions, I have always advised a closure of the fissure by operation, and several of these patients have—as advised—been operated upon by me.

My experience of the result in connection with these cases encourages me to advise that, even in adults, the closure by operation of a congenital fissure in the palate enables the patient to speak with greater ease and with greater distinctness, both in private and public life.

[In connection with these remarks patients were brought before the class, the characteristic points of these deformities demonstrated, and the suitable operative treatment for their relief described.]

THE TREATMENT OF ANGULAR DEFORMITIES AT THE HIP-JOINT.

*Read before the New York State Medical Association,
October 10th, 1893.*

By REGINALD H. SAYRE, M.D.,
Orthopædic Surgeon, Bellevue Hospital, New York.

LIKE a very large proportion of the cases which come to the orthopædic surgeon for treatment, the best thing to do for angular deformities at the hip-joint is to prevent their occurrence by proper treatment in the first place, and I hold that any patient who has sufficient recuperative power to recover from an inflammation in the hip-joint should do so with the legs practically parallel, and in a straight line with the body. But it very frequently happens that cases are so treated that they do not recover in this favourable position; but when the symptoms of active inflammation have all passed by, the limb is left in a practically useless condition from the amount of deformity present.

The treatment to be adopted in these cases differs with the nature of the disease which produced the deformity, and with the condition of the joint at the time the patient comes under observation, and these conditions vary so widely, that very different means must be adopted in different instances to