character, or if there is partial or complete nasal obstruction accompanied by a glairy discharge, diphtheria should be suspected and cultures taken. But if the patient's general condition in addition to the above symptoms suggests diphtheria, antitoxin should be given at once without awaiting the results of cultures. In all obscure cases the patient should be given the benefit of the doubt — *and antitoxin*.

If an epidemic of measles occurs in an institution in which large numbers of children are cared for, each child as it develops measles should be given an immunizing dose of antitoxin, and all inmates of the institution should be carefully watched for the earliest symptoms of either disease.

An early diagnosis and prompt treatment of the oncoming diphtheria may lower the present death-rate, but diphtheria arising during an attack of measles adds very much to the gravity of the patient's condition. There is no combination of the acute infectious diseases in which the death-rate reaches so high a point as in that of measles and diphtheria.

ADHESIVE PLASTER STRAPPING IN UMBILICAL HERNIA.

BY J. C. HUBBARD, M.D., BOSTON,

Surgeon to Out Patients, Carney Hospital; Assistant to Out Patients, Infants' Hospital.

UMBILICAL hernia of varying size is of very common occurrence in infants. The frequency is explained perhaps by the following fact (Minot's "Embryology"): "In the human embryo of 10 mm., the part of the intestine attached to the yolkstalk begins to enter the umbilical cord, and thereafter the length of the intestine, which leaves the body cavity proper and lodges in the celom of the yolkstalk increases until perhaps the tenth week. Thereafter it is gradually withdrawn into the abdomen. The cause of this temporary umbilical hernia is believed to be the strain produced by the yolkstalk." If for any reason this return of the intestine from the cord into the abdominal cavity is delayed, a hernia may be present at birth.

Of the many cases treated during the last few years at the Infants' Hospital I have been able to find fairly satisfactory records of 66 cases. Among these are a few where the hernia was not strictly umbilical, but through a separation of the recti muscles just above or below the navel. As the treatment is the same as for a true umbilical hernia, it seems fair to include them in the series. The treatment in all cases has been by strapping with adhesive plaster, with at times the addition of a pad over the hernia. It is useless to try to compare the result of treatment with pad to that without, for as a case ordinarily extended beyond the service of one surgeon the treatment was not consistent throughout.

Of the 66 cases 28 are specifically stated in the records to have been cured; that is, no bulging, ring closed, healed, etc. The ages of these 28

cured cases varied from 5 weeks to 5 years and 2 months.

2 months or under.....	14
2 to 4 months.....	8
Over 4 months.....	6

The duration of treatment lasted from 3 to 47 weeks. By comparing the length of time necessary for a cure with the age, rather interesting results are shown.

Duration of treatment in cases of

2 months or under.....	3 to 26 weeks; average 13.65
2 to 4 months.....	6 to 47 weeks; average 18.12
Over 4 months.....	6 to 46 weeks; average 25.83

From these figures it follows that the younger the baby the better the prognosis for a speedy cure.

The size of the ring appears to play a minor part. In 21 cases the size of the ring is mentioned. Those compared to the little finger, 13 cases, with an average duration of treatment of 18.6 weeks. Those larger than the little finger, 8 cases, with an average treatment of 17.5 weeks. The character of the ring I believe to be of greater importance than its size. The notes of the cases, however, are not detailed enough on this point to permit one to draw definite conclusions. I believe, however, that a ring which has a sharp, distinct outline, will close more slowly than one where it is indefinite and flabby.

The hernia varied in size from "very small," pea, to an apple. The size of the hernia, except in exceptional cases, seems to have little bearing on the prognosis. In 20 cases I have records of the size. In 10 it was as large, or larger, than a walnut, giving an average of 17.2 weeks for treatment, while in 10 other cases, where it was smaller, the average was 19.3 weeks.

The age of the baby, then, seems to be of the greatest importance in regard to the prognosis.

There were 32 cases which were still under treatment at the last note, and none of them was treated less than three weeks. Of these 32, 8 were stated specifically to be improving, and nothing was noted about the remaining 24 to lead me to suppose that they were not progressing well. Not one of these cases was treated for any greater length of time than the cured cases, the longest being only 34 weeks. It seems to me fair, therefore, to suppose that these cases would have been cured had the treatment been persisted in. This makes a series of 60 cases in which the adhesive plaster strap seems to have been satisfactory.

There are 3 cases of recurrence.

No. 23,382. A baby of 8 months, with a ring admitting the tip of the little finger. After a treatment of 22 weeks there was no bulging and the strap was omitted. Two weeks later the baby returned with a slight bulging. Eleven weeks later the hernia had not disappeared, though it was very small.

No. 24,478. A baby of 7 weeks, with a hernia the size of a cherry, and a ring which admitted the tip of the little finger. Was apparently cured in 40 weeks. One week later the hernia reappeared, and after 23 weeks it was the size of

a crow's egg, and the ring would then admit the tip of the little finger. The child then disappeared from the out-patient department.

No. 22,324. Six weeks old. Hernia the size of a grape; umbilical polyp present. After conscientious treatment of 13 months, during which the hernia was apparently healed only to recur, the ring admitted the tip of the little finger, and the baby was then operated on.

In three cases where the treatment was given up after a few strappings, a subsequent note mentions the condition of the hernia. In 2, after 11 and 27 months respectively, the herniæ had decreased in size, while in a third after 3 years it was decidedly larger.

An umbilical polyp, in addition to the hernia, was noted 6 times among the 66 cases.

CONCLUSIONS.

An umbilical hernia is ordinarily cured by adhesive plaster strapping. The younger the child the earlier the cure is to be expected. The fear of recurrence or failure is slight.

Clinical Department.

A CASE OF NASAL DEFORMITY FROM A MEDIAN FURROW, CORRECTED BY SUBCUTANEOUS IMPLANTATION OF A PORTION OF THE SEPTAL CARTILAGE.

BY J. L. GOODALE, M.D., BOSTON.

THE patient, a woman forty-five years of age, came to the throat clinic at the Massachusetts General Hospital in Dr. Clark's service in the summer of 1900, for the relief of a conspicuous nasal deformity, characterized by a median furrow, or depression, on the bridge, extending from the lower border of the nasal bones to the tip of the nose.

Examination showed this furrow to be due to the presence of abnormally well-developed alæ, and to the fact that the triangular cartilage failed to extend upward in front to the level of the alæ. On pressing the finger along the bridge of the nose it was possible to recognize the inner edge of each ala as a sharply defined, firm border. Between these borders the upper margin of the triangular cartilage was palpable only on deep pressure.

An attempt was made first in August, 1900, to reduce the alæ to the level of the triangular cartilage by incisions through each ala, made through its inferior surface upward nearly to the overlying external skin. The elasticity of each ala was thus destroyed, and by lateral pressure directed inward they could be approximated so as to obliterate the median furrow. An external splint was then applied and worn for a month constantly. It became, however, immediately apparent upon removal of the splint that the alæ had not been brought permanently into their new position, as they soon separated, with the result of again rendering conspicuous the median furrow.

In May, 1901, the writer made another attempt to correct the deformity by implanting subcutaneously a portion of cartilage below the furrow. The operation was carried out in the following manner: The patient was etherized, and a tenotomy knife was introduced through the skin of the roof of the left nasal vestibule, immediately anterior to the membrano-cutaneous junction, and a sweeping incision carried upward under the skin of the external furrow, in such a manner as to create a chamber, bordered above by the skin of the furrow, below by the upper margin of the triangular cartilage and the adjacent mucous membrane. An oblong piece of septal cartilage was dissected out from the right nasal passage just above the vomer. Care was taken to avoid injuring the mucous membrane of the left side of the septum adjoining the excised cartilage, and no perforation was created. The excised piece of cartilage measured about 2 cm. in length by 7 mm. in breadth. Its edges were carefully and quickly trimmed with scissors, and it was washed for a moment in boiled water. It was then introduced into the subcutaneous chamber which had been prepared for it, and adjusted into position by external manipulation, with the result of lifting the overlying skin, and completely obliterating the furrow. The incision through the roof of the left nasal vestibule was then closed with a silk suture. Moderate swelling and discomfort were present during the next twenty-four hours. In three days the swelling had gone down considerably, and there was no spontaneous pain. Slight tenderness was present on pressing the external skin. The transported piece of cartilage could be felt on external palpation of the nose. There was no evidence of infection at this time, or subsequently.

Three months later examination showed the transported cartilage to be in good position, and firmly united to the overlying skin. There was no return of the median furrow. The region of the septum on the right side from which the cartilage had been removed, was covered with smooth mucous membrane. The line of the incision in the left vestibule was not discoverable on inspection.

Medical Progress.

REPORT ON PROGRESS IN OBSTETRICS.

BY FRANK A. HIGGINS, M.D., BOSTON.

PLACENTA PREVIA.

SMYLY, formerly master of the Rotunda Hospital, in a lecture delivered before the Medical Faculty at Birmingham on "The Lower Uterine Segment and the Contraction Ring," says of placenta previa:

"The lower uterine segment plays a most important part in all cases of placenta previa, for not only is the growth of the placenta in this part of the uterus the essential feature of the condition, but its protection from injury during parturition