occurrence of labour pains and the pressure of the foctus in the cervix or vagina—as amply proved by Eclampsia actually commencing during labour and by the uterine contractions being often the starting point of a convulsion.

I entirely concur with Galabin when he says that "in those cases in which there has been an absence of albuminuria throughout, it appears, that these two causes—namely, increased reflex susceptibility and the presence of a source of irritation—complete the whole pathology."

WHAT IS THE CONNECTION BETWEEN ALBUMIN-URIA AND ECLAMPSIA ?

The case may be stated, as Dr. Byers does it, in the following way: "Does the kidney affection cause the Eclampsia or does the Eclampsia give rise to the abnormal state of the kidneys; or, finally, is there some primary cause occasioning the convulsions and at the same time giving rise to the kidney lesion?"

Dr. Braxton Hicks, in a paper read before the Obstetrical Society of London, advanced the view that the convulsion may cause the albuminuria. This fact is attested by Depaul, Legroux, Levy, Fordyce, Barker and others. Barnes in discussing this point says : "Accepting the facts cited by Hicks and others, we submit that they have only a limited application to the solution of the problem. If some cases of Eclampsia occur not proceeded by albuminuria but followed by it, it is nevertheless true that in a much larger proportion the albuminuria precedes, or at any rate is found abundantly, not after twenty-four hours, but at the time of the first fit. We must then see further back than the fit for the cause of the albumen. The most philosophical explanation appears to be that the high vascular tension, telling upon the kidneys impairs their working powers, and that from this cause and from the accumulation of noxious stuff, the proceeds of the double nutrition of mother and fœtus, there ensue two things: irritation of the kidneys and irritation of the cerebro-spinal centres. The researches of Mahomed go far to explain the occasional precedence of the fit over the albuminuria, by showing that the kidney is already labouring in the pre-albuminuric period. These researches and the facts observed are further in harmony with the views of Gull and Sutton, which imply, that arterial fibrosis and hypertrophy of the heart, re-act upon the kidney in causing Bright's Disease. The hypertrophy of the heart is a constant condition in gestation, associated with the high tension and the consequent fulness and tension of the small arteries, carries the analogy still closer. One circumstance that lends weight to this view is the increased liability to convulsions, at the menstrual epochs, when the nervous and vascular tension is increased. The tension falls when the child dies in utero." There

is thus the strong predisposition to exaggerated diastaltic action increased by the imperfect nutrition of the nerve centres: all that is wanted to overthrow the balance is an exciting cause; this is found in the noxious stuff, retained in the blood through imperfect excretion, this irritating the diastaltic centre provokes the convulsion. Dr. Barnes explains the presence of granular casts and epithelial scales, along with albumen in the urine, in the following way: Under the dominant vascular tension of pregnancy the mucus membrane of pelvic organs undergoes an intense degree of hyperæmia, which may be called congestion, but not inflammation. This hyperæmia in the cervix uteri and vagina is marked by deep red and purple coloration, by tissue engorgement, by the profuse shedding of epithelial scales and exudation of muco-albuminous fluid. A similar condition is supposed to exist in the kidney which is within the sphere of similar influences. Tarnier, De Sinety, Leyden, Sutton, Ewart, Barnes and others' researches, as to changes wrought in the liver in pregnancy, confirms the above facts by analogy. This change is said to be of the nature of cloudy swelling. Byers thinks that "if the kidney is the organ that is specially affected, we have puerperal Eclampsia." There can be no doubt that we are only beginning to discover the important bearings that changes in these two organs, liver and kidney, may have on pregnancy. In seven of the nine post-mortems in the Appendix the liver was found soft and fatty-looking.

(To be continued.)

J MEDICO-LEGAL NOTES.

SCROTAL SURGERY IN MOFUSSIL VILLAGES. BY C. BANKS, M.B., D.P.H.,

Civil Surgeon, Puri.

(Continued from page 68.)

On the morning of 17th December 1894 several of the persons on whom the *baidya* had operated were collected at Baliunta Dispensary for my inspection.

Gadai Sahu, male, aged 32, Hindu, cultivator, gave the following description of the various stages in the operation as performed by the *baidya*:—

"A small and superficial incision is made in the middle portion of the side of scrotum in front, 3 or 4 grains of a white powder are then put into the wounds and covered up with a piece of white paper or old rag. The patient is allowed to bathe daily, and is advised to eat tamarinds and *dohi*, and drink sugar and water to get the scrotum well ripened. This continues for a week or so, during which the patient feels much pain and suffers from fever.

"The *baidya* then introduces a sharp-pointed instrument, and lets out some water and pus. He then pushes in a piece of rag which is allowed to remain for seven or eight days. During this period there is much discharge and sloughing. He then tries to heal it by applying castor-oil leaves and butter. During this time the patient is allowed to eat bread, butter, ghee, &c. One-and-a-half months are required for a complete cure."

Case 1.—Fagoo Kandhua, aged 26, Hindu, cultivator. His disease, which began five years ago, was said to have been cured four years ago by the operation which has just been described. He has a scar 4 inches long in the right groin and another on the right side of scrotum, about $\frac{1}{4}$ inch in diameter. Skin movable over the testicle. Glands in both groins slightly enlarged. Denies syphilis. Never suffers from fever. No other part of body enlarged. The disease from which he suffered was hydrocele on which an operation appears to have been performed resulting in a radical cure.

Case 2.—Moni Sahu, aged 35, Hindu, shopkeeper. Disease began six years ago. Was operated on when the size of a small cocoanut. Eight ounces of fluid escaped. Has a scar $l\frac{1}{2}$ inch by $\frac{1}{2}$ inch in left groin, and another $\frac{1}{2}$ inch by $\frac{1}{4}$ inch on left side of scrotum in front. Skin of scrotum thickened. Glands on both sides of the size of a walnut. Denies syphilis. Skin and testicle not adherent. Hydrocele cured. Scrotum now taking on elephantoid action.

Case 3.—Netai Sahu, aged 36 years, Hindu, goldsmith, was operated on when scrotum was the size of two cocoanuts. Has one scar in each groin, 2 inches by 1 inch, and one on either side of scrotum in front, each of the size of a rupee. Cicatrices on scrotum are tunnelled from adhesions. Eight ounces of fluid said to have escaped after operation. Skin and testicle not adherent. Glands normal. No fever. No other parts of body enlarged. Six leucodermatous patches on front of left leg, one on dorsum of left foot, three on right leg and one on dorsum of right foot. Hydrocele apparently cured. Scrotum distinctly elephantoid, measuring 10 inches from symphysis to perinæum and 9 inches round the neck of the tumour.

Case 4.—Bali Barik, aged 35, Hindu, barber. Disease began three or four years ago. Was operated on. Three chittacks of fluid escaped. Has one scar in each groin, 4 inches long. and one on either side of scrotum in front. Glands in groin swell now and again. Has elephantiasis of scrotum and prepuce. Scrotum measures 10 inches by 8 inches. Skin not adherent to testicle. Hydrocele apparently cured.

Case 5.—Kanai Behera, aged 40, Hindu, fisherman. Disease began five or six years ago. Was operated on. Has one scar, 4 inches long, in either groin and one on left side of scrotum. Left side normal. Has right hydrocele. Measures 10 inches by $11\frac{1}{2}$ inches. Elephantoid disease beginning. Gets fever every 14 days. Skin not adherent to testicle.

Case 6.—Dharma Sahu, aged 28, Hindu, shopkeeper. Disease began three or four years ago. Was operated on when the size of a mango. Half chittack of fluid escaped. Has a scar, 4 inches long, in right groin, and one on right side of scrotum in front. Glands in groin of the size of a walnut. Gets fever every four or five months when the glands increase in size. Has swelling of right leg. Contracted syphilis three years ago. Has leucodermatous patches on the penis. Skin adherent to the testicle. Hydrocele cured.

Case 7.—Narain Suin, aged 25, Hindu, cultivator, operated on five years ago. Sixteen ounces of fluid escaped. Has one cicatrix in either groin, each 4 inches long, and one on each side of scrotum about the size of a rupee. No fever and no swelling of the glands. Appears to be taking on elephantoid action. Hydrocele (double) apparently cured. Skin not adherent to testicle.

Case 8.—Jagi Sahu, aged 25, Hindu, goldsmith. Disease began four years ago. Was operated n one year ago. Six chittacks of fluid escaped. Has one scar in either groin, each 1 inch long, and two on scrotum in front. Skin adherent to testicle on right side; free on left. Hydrocele cured.

Case 9.—Bhikari Sahu, aged 25, Hindu, cultivator. Disease began five years ago. Was operated on one year ago. Eight ounces of fluid escaped from each side. Has one scar in either groin and one on each side of the scrotum. No fever and no enlargement of glands. Hydrocele (double) cured.

Case 10.—Narayan Jena, aged 23, Hindu, cultivator. Disease began four years ago. Was operated on last year. Thirty-two ounces of fluid escaped. Has one scar on either groin and one on either side of scrotum. No fever, and no enlarged glands. Disease taking on elephantoid action. Hydrocele (double) apparently cured.

Case 11.—Govind Sahu, aged 37, Hindu, shopkeeper. Disease began eight years ago. Was operated on five years ago, when only 2 ounces of fluid escaped. Small scar in right groin and one in front of right side of scrotum. No fever or enlargement of glands. No swelling of legs. Skin adherent to right testicle. Hydrocele cured. Appears to be taking on elephantoid action.

(To be continued.)

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TYPHOID FEVER IN A NATIVE OF INDIA.* By Surgeon-Captain Harold Hendley, D.P.H., CAMB., &c., Dharmsala.

CASES of enteric fever in Natives of India in which *post-mortem* examinations have undoubtedly proved the character of the disease are sufficiently rare to justify me in troubling the Congress with notes on a single case which

* Read at the Indian Medical Congress, December 1894.