granules being distinctly visible without magnifying aid; the pelvis and infundibula were dilated, and their lining membrane exhibited a vascular arborescent appearance. The rest of the abdominal viscera were healthy. Circumstances prevented an examination of the contents of the thorax.

Remarks.—In this case during the early stage of the disorder, some doubt existed as to the source of the hæmorrhage. The acute pain which the patient sometimes suffered in the loins, and which was generally brought on or aggravated by exercise, warranted a suspicion that the seat of hæmorrhage was in the kidney, and probably induced by the presence of a calculus. A closer investigation, however, satisfied me that the *fons et origo* was of a different character and in a different situation. A catheter was introduced into the bladder, which caused much pain in its passage from extreme sensitiveness of the meatus and neck of the organ. The instrument on passing the neck, received a direction towards the fundus. An obstruction was felt when the point was attempted to be passed downwards, and the effort was attended with excessive pain. The finger was then introduced into the rectum, and on turning the point upwards in the direction of the pubes, the existence of a somewhat bulky mass was detected, not very distinctly but sufficiently so to convince me of the presence of some abnormal growth connected with the bladder. The result of this examination, together with the presence, in all their severity, of the symptoms above detailed, left little doubt in my own mind and that of my father, (who assisted me in the examination and treatment of the case,) of the existence of a malignant formation in the bladder, and established a conviction of the hopeless condition of the patient.

Hæmorrhage from the urinary organs is a symptom which usually gives rise to much anxiety in the mind of the patient, and it becomes a matter of importance to determine its source, and the pathological conditions which give rise to it, as in many instances it depends on circumstances transitory or remediable, whilst in others it is consequent upon extensive organic changes, which baffle all the appliances of medical art. When the hæmorrhage arises from local injuries, the use of cantharides, turpentine, &c., vesical calculi, purpura, and in the course of adynamic fevers, the cause of the discharge is tolerably evident, but when it is consequent upon calculi in the kidney, or malignant growths in those organs, or in the bladder, the diagnosis is more obscure. I am inclined to think that much reliance cannot be placed on the appearance of the blood, as furnishing evidence of the seat of discharge, and with the utmost respect to the high authority of Dr. Prout, I doubt whether the equal diffusion of blood through the urine can be regarded as conclusive evidence of hæmorrhage from the kidney, as the same condition may and does obtain when the blood is furnished by the bladder. The accumulation of coagula in the bladder, occasioning pain and a sense of distension and a bearing upon the perineum, may induce a suspicion that the bladder is the seat of malady, and on the other hand pain in the lumbar region, and tenderness on pressure over the situation of the kidney, (connected it may be, with disease of that organ,) may exist in a great degree, as in the case already detailed,

whilst the hæmorrhage in fact arises from morbid structure in the bladder.

I have in my possession two calculi which I extracted a few years since from the right kidney of a woman, who died from long continued hæmaturia. They occupied the entire cavity of the pelvis of the kidney, and one of them, the size of a small nutmeg, is furnished with a sharp spine similar to a bramble thorn. Much of her suffering, which was at times excruciating, was referred to the rectum. She laboured under obstinate costiveness, and the passage of a small faecal mass was invariably attended with great pain. No stricture nor disease of the lower bowel could be discovered during life, and the *post-mortem* examination revealed an entirely healthy state of the whole alimentary tube. I am of opinion that the frequent presence of coagula in the bladder gave rise to the uneasiness which was referred to the rectum, and interfered with the healthy performance of its functions.

When, however, it occurs that pure blood follows the termination of the act of micturition, the urine at the commencement being tolerably clear, there is sufficient evidence that the blood is yielded by the bladder, and if any fragments of encephaloid matter be detected in the excretion, the diagnosis will be put beyond doubt, and in this case the microscope will be an important auxiliary. In cases where there is reason to suspect encephaloid disease in the bladder, Sir Benjamin Brodie has advised that the organ shall be injected with tepid water, and exploration made with a sound or catheter having a considerable curve, and if in connection with this, the examination of the bladder through the rectum be invariably resorted to, in some instances our means of diagnosis may be materially strengthened.

Maldon, Dec. 10, 1846.

ON THE EMPLOYMENT OF OPIUM IN INFLAMMATION.

By W. H. RANKING, M.D., Physician to the Suffolk General Hospital.

A correspondent of the *Provincial Medical Journal*, who propounded a short time since a number of queries, to one of which the following observations are intended as a reply, appears to have taken a correct view of the requirements of medical science in the present day, and has adopted an excellent means of obtaining a fulfilment of at least some of them. There can be little doubt in the mind of the reflective practitioner that our chief want is a correct appreciation of the nature, value, and applicability of our therapeutic resources; a knowledge of what they are capable and what they are incapable of doing; and when good arises from their use, of how much is to be considered as the *post hoc* only;—how much the *propter hoc*. He must see that there is a Scylla and Charybdis in the treatment of disease as well as in other things; that on one side of us is an overveining dependence upon drugs to the despal of the powers of nature; on the other too great a reliance on the powers of nature, to the refusal, almost impious, of the aid of the many medicinal agents which we cannot conceive that a beneficent Creator would have placed at our disposal if they had not some property which ought to cause

them to be received by us as a boon. To learn the landmarks of this narrow and difficult channel, and to keep his attention upon the destructive webs of medical scepticism on one side, and pharmakolatry on the other, should be, we think, the subject which ought now to assume a prominent place in the attention of the medical investigator, and I trust that it will be materially elucidated in the communications which the queries alluded to are calculated to elicit.

The legitimate sphere of action of *opium* in the treatment of inflammatory diseases is, we conceive, a point upon which our notions have arrived at tolerable precision. Under whatever modifications of individual circumstances attending such diseases the beneficial action of opium is observed, one well-marked morbid condition has, according to our observation, existed in every case, and that is an excitement of the nervous system, altogether disproportionate to the exaggeration of vascular action. This excitement is not shewn in the existence of spontaneous pain alone, as we know that that symptom may be insignificant or altogether absent in instances of the most extensive and destructive inflammation; neither is it shewn mainly by increased sensibility to local impressions. The excitement to which we allude exhibits itself in disorders of the sensory and motor functions of the nervous system chiefly, and consists in watchfulness, or transient delirium, irregular respiration, and especially in restlessness and jactitation. In this condition of things, whatever be the violence of the local inflammation, or whatever organ be affected, (excepting the brain in some instances,) opium is imperatively called for. In other words, whenever, during the existence of inflammation, symptoms indicative of a loss of balance between the nervous and vascular systems exhibit themselves, sedative medicines are demanded in doses proportionate to the nervous preponderance.

This want of balance declares itself, we believe, chiefly under two conditions—1st, the existence of inflammation in a constitution naturally excitable, or in which the general powers have been reduced by the disease itself, by treatment, or by contingent circumstances, relating to food, air, &c.; and, 2nd, in inflammation of such organs or tissues, the implication of which induces a state of things more or less approaching to that condition which, for want of a better term, we are in the habit of calling *shock*. In illustration of the first division, we may mention inflammation occurring in the hysterical constitution. In these cases the phenomena which depend upon irritation of the nervous centres take so decided a lead in the symptomatology of the case, that until they are controlled by opium, or some, under certain circumstances, more appropriate sedative, the inflammatory symptoms proper do not display themselves with their characteristic features. Again, inflammation may attack an ill-fed or previously debilitated individual; or the inflammation may have been too actively combated by blood-letting, mercury, &c., without reference to the deficient resiliency of constitution, which, in children more particularly, may lurk behind an appearance ostensibly robust. In these cases there may exist from the first, or there comes on assuredly at no distant period, a condition in which opium becomes necessary to save life, to prevent, in fact, in the latter case, the anomaly of the patient "dying cured."

Under the second class of cases in which opium becomes a necessary part of the treatment, or is even mainly to be relied upon, is inflammation of an organ or tissue largely supplied with ganglionic nerves, and in which, for this reason, the nervous system requires a large share of attention in the treatment of the case. Such is peritonitis or enteritis, either idiopathic or secondary; such are, also, one form of delirium tremens, diffuse cellular inflammation, and more particularly phlebitis, the inner membrane of veins having the closest analogy to serous membrane in many respects, but especially in its large supply of organic nerves. In all these inflammations the usual battery of antiphlogistics are worse than useless, unless combined with the liberal exhibition of opium.

The symptoms either existing *ab initio*, or as is more commonly the case, coming on in the course of the disease, which indicate the necessity for opium, can only become familiar to the practitioner by clinical observation; but as far as written descriptions can be relied upon, it may be stated, that the broad expression of this condition consists in a failure in the power or regularity of the pulse, pallor of the countenance, moist skin, (but not in all cases,) tendency to incoherence, with restlessness, sleeplessness, and in an aggravated form, jactitation. This is the broad outline, so to speak, of the state referred to, but it declares itself in minor degrees, with which experience alone can render us familiar, and the appreciation of which is in itself sufficient in many cases to make the difference between a successful and an unsuccessful practitioner; for to persevere in antiphlogistic treatment, or to withhold opium, when these indications offer themselves, is to destroy the patient.

In the exhibition of opium when these symptoms shew themselves in inflammation, I know of no drawback,—no contra-indication which should weigh for one moment against its paramount necessity. Be the skin sweating or dry, the tongue moist or dry, the bowels constipated or not, opium must be given. The constipated bowels which Dr. Chambers, in the last number of this Journal, seems to regard as inducing the necessity for hesitation in the use of the medicine, I regard as of the least importance in the generality of inflammations; in some, as in enteritis, a quiescent state of the bowels is even needful; and were it not so, the probability is, that if the case has been properly managed at first, such a clearance would have been effected as will render any risk from accumulation comparatively small.

These observations are not intended to offer any new ideas, or even any remarkably good exposition of old ones, but more as an effort by example, to tempt many of the members of our excellent Association, to draw from the rich stores of practical learning which I know to be possessed by them.

Bury St. Edmunds, Dec. 4, 1846.