present. He then left the home and went to the country, where he has remained, leading an ordinary life, and able to undertake any exercise.

The interesting features of this case are the past history, the age of the patient, and the presence of many insignificant signs which have from time to time been stated to be observable in hypothyroidism.

It was ascertained that the patient had first noticed, six months previously, that he was rapidly putting on flesh and was not feeling so "fit" as formerly. About this time he was subjected to a considerable amount of business worry, which, coinciding with his engagement and forthcoming marriage, seems clearly to constitute the predisposing cause of the hypothyroidism. The exciting cause would seem to be over-exertion on the golf course, associated with some slight gastric disturbance brought about by injudicious diet.

While thyroid deficiency is seen at all ages and in both sexes, it is not very commonly observed in young men of this age.

The signs observed in this case presented a typical picture of what has been referred to as "submyxoedema," and many small factors, insignificant in themselves, helped to form the clinical picture. Of these the temperature and pulse were the most marked, while the presence of the rough skin, the patches of psoriasis, and the premature greyness were all compatible with what is seen in thyroid deficiency.

The diagnosis was confirmed by the extreme rapidity with which the symptoms improved, and the signs disappeared as soon as this deficiency in the normal thyroid secretion was remedied by the administration of thyroid extract.

CEREBRAL CYST WITHOUT LOCALIZING SYMPTOMS.

By ARTHUR TURNBULL, M.B., CH.B. GLASG.

B. G., aged 5, was admitted to the Western Infirmary on January 18th, 1910, as an urgent case. She had been healthy up to September, 1909. At the end of that month she had scarlet fever and was transferred to one of the fever hospitals. Both ears began to run about two and a half weeks after admission to the hospital. The running continued, especially from the right side. Some three and a half weeks after admission an abscess developed at the back of the right ear, and this was lanced. An attack of diphtheria then supervened. She was dismissed as convalescent on January 14th. Her mother had noticed that "her manner was rather peculiar," but had paid no great attention to this as the general condition appeared good.

On January 15th, 1910, she complained of pain in the neck and in the stomach, pressed her brow on the pillow, and appeared to feel pain in the forehead. She awoke crying the next morning and did not appear to be quite *compos mentis*. Vomiting began on the evening of January 15th, 1910, and continued till January 18th; it bore no relation to food, and drugs had no effect on it. She appeared to be losing strength. The face was alternately flushed and pale. Her mother stated that her arms and legs had never been paralysed, but were weak owing to lying in bed. She kept rolling her eyes wildly from side to side; there was no squint, nystagmus, or facial paresis, but much pain all over the head, especially at the back. The bowels were constipated. The family history was good.

Condition on Admission.

The child was puny and thin, and very pale. Occasionally rapid flushings of the face could be noticed. The temperature was 102° F., the pulse 132, and the respirations 36. She was in a condition resembling coma, alternately restless and soporose, and dropping off after turns of excitement into a condition resembling sleep. During the attacks of excitement she was very restless, throwing her arms about and struggling against any movement of the head. She seemed to feel the cold very acutely, the teeth chattered, and she drew the blankets up round her. She sometimes pressed her hands to her forehead, as if in pain. There was no strabismus. The pupils were equal and very dilated, and reacted equally to light. The movements of the eyes were very irregular,

preventing proper ophthalmoscopic examination. There was slight paresis of the left side of the face. There was absolutely no evidence of unilateral intracranial pressure. Both tympanic membranes had been destroyed. Traces of discharge were seen on the right side and granulation tissue in the tympanic cavity; on the left side there was copious exudation of foul pus. At a later examination there was an exceedingly foul discharge from both ears. Behind the left ear the old incision wound was discharging foul-smelling pus.

Operation.

On the day of admission Sir William Macewen operated on both sides of the head.

On the left side the old Wilde's incision was reopened and enlarged, and a large scale of necrotic bone removed. On the right side a radical mastoid operation was performed. On reaching the middle ear copious purulent material issued from the cavity, and on further excavation in an upward direction it was found that the destructive process had affected the tegmen tympani, and large quantities of serous and very foul fluid containing numerous small white particles began to issue from the upper limit of the tympanic cavity. The quantity of exuding fluid was such as to indicate origin from the cerebrum. Exploring higher and more posteriorly a large cyst was discovered in the temporo-sphenoidal lobe. The walls were thickened, but after probing with dressing forceps and searcher and perforating some intracystic partitions large quantities of foul serum escaped, interspersed with many pieces of broken-down brain tissue. The amount of fluid and material discharged was sufficient to indicate a cavity the size of a small Tangerine orange, and therefore one which had encroached upon the descending horn of the lateral ventricle. A portion of broken-down brain tissue composing the cyst wall was removed. Iodoform-boric crystals were introduced into the cavity exposed, and one piece of iodoform gauze inserted, while ear packing steeped in carbolic oil was used for the external auditory canal.

During most of the operation a right external squint was evident, and the pupils were very variable.

During the night after operation several convulsive seizures took place, and the next morning coma supervened, the flushing of the face being extreme; death occurred twelve hours after operation.

A *post-mortem* examination was, unfortunately, not obtained; but the importance of the case does not depend on whether the infection was pyogenic or secondary to a tuberculous process. The important point is that a patient with a large unilateral brain cyst may manifest absolutely no localizing symptoms, both when life was apparently not threatened (the child not even being thought ill) and on the symptoms becoming urgent shortly before death. This is, of course, already well known, but it seems desirable to emphasize it.

NOTES OF A CASE OF CONTRACTION OF THE UPPER AND LOWER LIMBS AFTER STILL'S DISEASE.

By J. CRAWFORD RENTON, M.D.,

SURGEON AND LECTURER ON CLINICAL SURGERY, WESTERN INFIRMARY, GLASGOW.

M. L., aged 7, was placed under my care by Professor Stockman, with the history of an attack of Still's disease when aged 3 years.

Her condition on October 19th, 1912, is well shown in Fig. 1. She was quite unable to walk; she lay with her legs and thighs drawn up, and could not extend them. There was contraction of both the adductor and hamstring muscles, the knee-joints and ankles were swollen, and creaked on moving. The flexors of both hands were contracted. When the child was placed on the floor she could not move her legs. When the weight of her body was supported she was unable to use either leg owing to the contractions.

On October 28th, 1912, the adductor tendons at their origin were dissected out according to the method of Mr. Robert Jones of Liverpool. The hamstring tendons on the right side were divided freely subcutaneously, and on the left side portions were dissected out. The limbs

could then be abducted and straightened to a considerable extent; the child was then placed on an abduction splint.

Fig. 1.

Massages of both arms and legs was systematically carried out, and this produced great improvement in the movement of the hands and strengthened the muscles of the lower limbs.

On November 26th, 1912, the tendo Achillis was divided in both legs, and movements were continued several times under chloroform.

As on February 15th, 1913, the improvement was

satisfactory and she could adduct and abduct her limbs, flex and extend the knee-joints and move both ankles, she was fitted with Thomas's caliper knee-splints, fastened to the heels of the boots. Daily exercise in walking was ordered, and in a month the child was able to walk alone with the help of a stick. Fig. 2 shows the patient with splints applied.

She gradually improved until she could walk without the splints, as shown in Fig. 3; and on May 24th, 1913, she

Fig. 2.

Fig. 3.

was dismissed quite able to walk, but was advised to wear the splints for some months.

Dr. D. S. Smith, of Lesmahagow, has taken great interest in the child, and wrote on July 20th, 1913: "She is getting on fairly well, is able to walk a good distance with the aid of a stick, and we are continuing massage and passive movements."

On October 29th, 1913, she was brought to see me, and I was pleased to find that she could walk either with or without a stick, and with or without the splints. She could flex and extend both her knee-joints and lifts both her legs very well. The hands had greatly improved, but there was still a tendency to increased flexion.

This case illustrates well the importance of operating on such cases, and confirms the value of Mr. Jones's recommendations.

D

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A NOTE ON THE PRESCRIBING OF THYROID SUBSTANCE.

FROM time to time I have met with unexpected results following the administration of thyroid substance, and have attributed these results either to tolerance or idiosyncrasy on the part of the patient. On investigation, however, I find that the explanation may be different.

In the first place, while there is but one pharmacopoeial preparation of thyroid, the "thyroideum siccum," there are numerous other preparations on the market, and many of these are labelled as the equivalent of so much fresh gland. In the absence of explicit instructions it is thus possible for the physician to prescribe a dose of thyroid substance which he intends to be fresh thyroid, while the chemist interprets his prescription as meaning "thyroideum siccum." The reverse may as easily occur.

In the second place the *Pharmacopoeia* gives no statement of the relationship which thyroideum siccum is to bear to the fresh gland. Now the *British Pharmaceutical Codex* and different trade labels inform us that the proportion of dry to fresh gland is 1 to 5, and we may assume that the possessors of the trade labels manufacture accordingly.

On the other hand the proportion is given by Martin¹ as 3.7, and by Guyer² as 3.6. The latter figures closely correspond, and are based on careful observation. I have not been able to find any authority for the 1 to 5 factor. It is obvious that the manufacturer who makes three and a half tablets from a given weight of fresh gland is supplying us with a more potent drug than one who makes five tablets from the same amount of the fresh substance, and different chemists may thus supply thyroid of varying potency in dispensing the same prescription.

In view of the evidence offered by the authors quoted it is difficult to resist the conclusion that the 1 to 5 standard has been reached by using fresh glands which have been indifferently trimmed and cleaned from fat, and we may note in passing that the profits accruing from the sale of 1 to 5 products will be greater than those obtained for the produce of clean thyroids.

Some firms standardize their thyroid products in terms of iodine. This may be a good test, but until it is proved that the therapeutic activity of fresh thyroid corresponds to its iodine content it is unwise to rely upon it.

In conclusion I wish to emphasize the importance of making it clear whether we mean fresh or dry thyroid in our prescriptions, and in the case of dry thyroid it is well to have some knowledge of its relation to the fresh substance.

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VANILLA AS A SKIN IRRITANT.

THAT *Primula obconica* and *Rhus toxicodendron* cause a very annoying form of dermatitis is well known, but less generally known is the fact that vanilla essence may in certain individuals cause equally troublesome symptoms.

A perfectly healthy patient of mine, of an inquiring turn of mind, liking the smell of vanilla, added about $\frac{1}{2}$ oz. of the essence to about 5 oz. of a hair lotion consisting of quinine, spirit of lavender, and rectified spirit (which he was in the habit of using). About twenty-four hours after its application intense itching of the scalp occurred, which gradually extended over the forehead, behind the ears, and down the neck. It did not at first strike him that vanilla was to blame, and for a day he kept rubbing it in in the hope of "cooling," the part as he expressed it. The result was that his eyes were opened metaphorically to the cause although practically they were almost closed by the swelling which followed. Not content with this experience he performed a control experiment on the front of the forearm, because, as he said, it was difficult to believe that vanilla, which he had