

efficient. The following experiments were performed with it, selecting again S. A. and M. S. as the operators.

Experimenter.	Control.	One Foot Distance.	Two Feet Distance.
S. A.	Without a mask 4	25	Overgrown.
	With a mask ... 8	12	"
"	Without a mask 5	10	6
	With a mask ... overgrown	8	Overgrown.
"	Without a mask 2	Overgrown	5
	With a mask ... 5	"	10
M. S.	Without a mask overgrown	"	25
	With a mask ... 24	"	4
"	Without a mask overgrown	"	Overgrown.
	With a mask overgrown	"	"
Self	Without a mask 1	7	1
	With a mask ... 1	5	2
Total	Without a mask 12+2 overgrown	42+3 overgrown	37+2 overgrown.
	With a mask 38+2 overgrown	25+3 overgrown	16+3 overgrown.

The large number of plates which were overgrown somewhat mars the value of the results, yet it is seen that in the total of the cases without a mask there was a marked increase of contamination, while when the mask was worn there was no increase in the contamination of the plates read over beyond that of the control. The experiment without a mask was in each case performed first, hence probably the greater pollution of the controls when the mask was worn.

In regard to the use of gargles, the following was the result obtained by a strong gargle containing carbolic acid, chlorate of potash, and glycerine, on S. A. :

S. A.	Control.	One Foot Distance.	Two Feet Distance.
Before gargle	4	31	2
After gargle	5	28	3

In conclusion, I desire to express my obligations in the first place to Sister Hastie of Ward VII, without whose indefatigable and skilful help I could not have executed these experiments; to Mr. Lionel Colledge for his many valuable suggestions; to Professor O'Sullivan of Dublin University for his kindly aid with the bibliography of the subject; and, finally, to all those who, at considerable personal discomfort, took part in these experiments.

REFERENCES.

- ¹ Vide *Practitioner*, vol. lxxix, No. 413, p. 520. ² BRITISH MEDICAL JOURNAL, July 2nd, 1904. ³ *Ibid.*, June 11th, 1904. ⁴ *Centralblatt für Bacteriologie*, xxiv, Bd. 1903, No. 1. ⁵ *Ibid.* ⁶ *Loc. cit.*, October 8th, 15th, 20th, 1903. ⁷ *Sterilization of the Hands*, by Mr. Leedham-Green, pp. 65, 72. ⁸ *The Floating Matter of the Air*, by John Tyndall, second edition, p. 117. ⁹ *Ibid.*, p. 51. ¹⁰ *Journal of Hygiene*, vol. 3, No. 4, p. 570. ¹¹ *Loc. cit.*, p. 47.

KERATOSIS PALMARIS ET PLANTARIS IN FIVE GENERATIONS.

F. H. JACOB,
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BY

ADAM FULTON,
M.B., B.Ch., B.A.O., R.U.I.

THERE lives in this town a man, J. W., who suffers from keratosis palmaris et plantaris in a marked degree.

In adjoining houses live three children and three grandchildren who have inherited the condition.

The youngest child affected is twenty months old, and the skin of the palms and soles, instead of being thin, pink, and shiny, is considerably thickened, white, and rough, like ground glass.

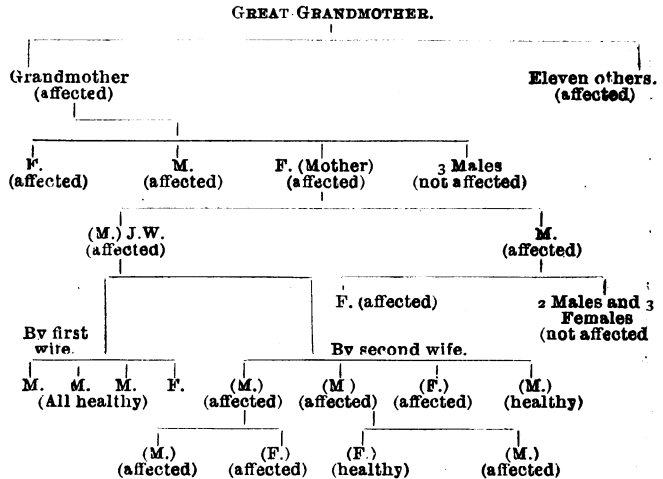
In the adults the horny epithelium is about $\frac{1}{8}$ in. thick and almost black. It presents, in lines corresponding to the normal folds of the skin, deep fissures which have at their base apparently normal epithelium and which, therefore, do not get sore, nor crack and bleed, as do those in acquired keratosis.

J. W. gives the following family tradition as to the origin

of the complaint. His great-grandmother, while returning on a troopship from India, was one day looking over the bulwarks and was startled by the unexpected jumping of a large fish out of the water. "A fish, a fish," she cried, and clapped her hands together. The child of which she was then pregnant was born with "fish scales" on its hands and feet, as were also the eleven other children to whom she subsequently gave birth. J. W. remembers his grandmother perfectly well, and vouches for the fact that both she and his mother suffered from this affection.

Unfortunately this hereditary condition is looked upon as a skeleton in the family cupboard, and our request for permission to take photographs of it was refused.

Appended is a full genealogy of the family:



TREATMENT OF SEROUS EFFUSIONS BY INJECTION OF ADRENALIN CHLORIDE.

BY
H. W. PLANT, and PATRICK STEELE,
B.A.Lond., M.R.C.S., L.R.C.P., M.B., Ch.B.Edin.,
House-Physician, House-Physician,
Queen's Hospital, Birmingham.

THIS method of treating serous effusions was first advocated by Barr, of Liverpool, in 1903.

In the first case, one of malignant disease of the pleura with haemorrhagic effusion, he used adrenalin injections empirically, and found the treatment entirely successful as regards the effusion. He then tried it on other cases, both pleural and peritoneal, with almost invariable success even in a case of pericarditis with effusion. In his pamphlet he states that the results obtained in cases of ascites from hepatic cirrhosis were not quite so good as in those resulting from tuberculous peritonitis and malignant growth. The only cases of ascites, with one exception, in which we have tried adrenalin have been those due to cirrhosis of the liver, and without exception the treatment has proved successful. In only one case have we had to inject the adrenalin more than twice, and in the majority of our cases one injection has proved sufficient.

In all cases in which we have tried the effects of the injection of adrenalin the following has been the method adopted:—As much as possible of the fluid was withdrawn by a two-way trochar and cannula, and through the cannula, still *in situ*, 1 drachm of adrenalin chloride (1 in 1,000), diluted to $\frac{1}{2}$ oz. with sterile water, was introduced by means of an exploring syringe. The cannula was then removed, the wound closed with wool and collodion, and, in abdominal cases, the abdomen was gently manipulated for five minutes and a binder firmly applied.

Appended is a summary of the cases in which we have tried this method:

- Cirrhosis of Liver.*
CASE I.—G. K., aged 54, wireworker. Admitted July 11th, 1904. Complaint, abdominal pain and swelling. Abdomen greatly distended and giving all the usual signs of fluid. There was an umbilical hernia, fairly easily reducible. Paracentesis abdominis was performed on the following dates:
July 14th. 20 pints drawn off: specific gravity 1009.