tepid water, placed over the eye with a piece of lint soaked in it. I have invariably found it to answer its purpose. When it is associated with iritis, drops of liquor atropiæ sulphatis are used as usual. When an abscess forms in the cornea, it is best to open it. In one case of acute glaucoma and disorganisation of the eyeball, I performed the operation of enucleation. In cases of partial staphyloma and leucoma, it is better to wait, and leave the patients in the hands of the ophthalmic surgeons for proper treatment. In children, and in some patients, I have found it exceedingly difficult to keep their eyes at rest—an important factor in the success of their treatment—and prevent them from scratching. In these cases, I have used the Cellini eye-protectors, of which Dr. L. Herbert of Paris speaks highly. They are made of zinc, and are of two varieties, perforated and non-perforated. I prefer the latter, as they keep the eyes cool. They are of the size and shape of the eyelids, over which they are fixed by an elastic band, that goes round the head. They keep the eyelids at perfect rest, and prevent them from scratching. When worn once or twice, they are of no more trouble to the patients than spectacles are. I am not prepared to vouchsafe the physical and chemical properties claimed for them.

THIRTY-THREE CASES OF CONCURRENT VARIOLA AND VACCINIA, WITH ANALYSIS AND REMARKS.

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THE presence on the same subject, at the same time, of the eruptions of two febrile disorders, which are variously regarded as either essentially the same, or as allied members of the same group, is in itself of sufficient interest to be noted, were it not for the wider and deeper significance of the condition variola-vaccinia, as affording us some appreciable criterion of the modifying influence of vaccination performed during the incubation-period of small-pox. The numerous letters bearing on this subject that have appeared in the medical journals from time to time sufficiently show the widespread interest taken in the subject; and hence I have been induced to tabulate the following consecutive cases, noticed by me at the Fulham Hospital during the epidemic of the past year, and to attempt to formulate some conclusions from the data afforded.

TABLE A.—Primary Vaccination.

No.	Sex.	Age.	Day of Incubation-period* on which Vaccination was Performed.	Character of Resulting Vaccination.	Variety of Small-pox.	Result as to Recovery and Complication.
1	F.	10 years	Tenth	4 recent vesicles	Confluent	Prolonged recovery; pitting and disfigurement.
2	M.	3 "	Probably third	4 recent vesicles	Discrete	Rapid recovery.
3	F.	4 "	Third	4 recent pustules	Discrete	Recovery.
4	F.	6 "	Probably ninth	4 recent vesicopustules	Coherent	Recovery.
5	M.	7 "	Ninth	3 recent vesicles	Coherent	Recovery.
6	F.	11 mths.	At end of period; day not fixed	3 recent vesicles	Confluent	Rapid death; bronchitis and laryngitis.
7	F.	9 years	Sixth	5 recent pustules	Coherent	Recovery.
8	F.	14 "	Fourth	3 recent pustules	Confluent	Recovery; conjunctivitis and œdema of feet.
9	F.	9 "	Probably third	3 recent pustules	Confluent	Recovery.
10	F.	30 "	Eighth	3 recent pustules†	Confluent	Prolonged convalescence; numerous abscesses.
11	M.	2½ "	Probably eighth	3 recent pustules	Confluent	Recovery.
12	M.	2 "	Probably tenth	4 recent pustules	Confluent	Recovery.
13	M.	2 mths.	Probably eighth	3 recent pustules	Coherent	Recovery.
14	F.	9 years	Probably sixth	4 recent pustules	Confluent	Recovery; abscesses.
15	F.	23 "	Third	1 recent pustule	Confluent	Slow recovery.
16	F.	14 "	Seventh	3 recent vesicopustules‡	Confluent	Protracted recovery.
17	F.	15 "	Eighth	4 recent vesicles	Confluent	Protracted recovery.
18	M.	3 "	Not fixed§	5 advanced pustules	Discrete	Rapid recovery.
19	F.	2 "	Not fixed	4 recent vesicles	Confluent	Recovery.
20	F.	5 "	Not fixed	4 recent vesicles	Coherent	Recovery.

* This reckoned as twelve days.

† Surrounded by a crop of small vesicles and a purplish-red blush.

‡ Surrounded by a crop of small vesicles.

§ From character of pustules, probably early.

Analysis.—It will be observed that the majority of cases of this condition noted were in females; no inference, however, can be drawn

from this, it being probably only a coincidence. The ages range between two months and thirty years, the majority being under five years. Most were vaccinated on the third and on the eighth days of the incubation-period, the times ranging through almost all the twelve days of that period. The vaccination observed on admission consisted usually of pustules, which were mostly three in number. The variety of small-pox in most of the cases was confluent; only one death occurred, and recovery was noted as prolonged and attended with complications in seven, rapid in two.

Remarks.—In order to gauge the amount and degree of protection afforded by vaccination in these several cases, we must compare the variety of disease and result of attack, first with the day on which the operation was performed, and then with the number of pocks produced. We thus notice that the majority of the confluent and coherent cases were vaccinated from the eighth to the twelfth day of the incubation-period, and that, in the discrete, this took place within the first three days. The fatal case was vaccinated at the end of the period, the majority of the prolonged and complicated recoveries during its latter half; whilst both the rapid recoveries were early vaccinated: one on the third day definitely, and the other, from the character of the pustules, probably also about that time. On comparing the variety of disease with the number of resulting pocks, we find most of the confluent and coherent cases vaccinated in three places, whilst the discrete are not vaccinated in less than four. The fatal case showed only three vesicles; three only of the seven protracted recoveries were vaccinated in four places, whilst the rapid ones showed four and five pocks respectively.

TABLE B.—Revaccination.

No.	Sex.	Age.	Day of Incubation-period* on which Vaccination was Performed.	Character of Revaccination.	Character of Primary Vaccination.	Variety of Small-pox.	Result.
1	F.	16	Eighth	4 recent vesicles	1 fair mark	Coherent	Protracted recovery.
2	F.	17	Third	2 recent pustules	2 fair marks	Discrete	Recovery.
3	F.	14	Twelfth	3 recent vesicles	2 fair marks	Confluent	Recovery.
4	F.	24	Fifth	2 recent pustules	Traces of marks	Discrete	Recovery.
5	F.	20	Fourth	2 recent pustules	Fair marks	Discrete	Recovery.
6	F.	15	Sixth	5 recent pustules	Doubtful	Coherent	Recovery.
7	M.	3	Not fixed	3 recent pustules	3 poor marks	Confluent	Recovery.
8	F.	13	Probably tenth	4 recent pustules	5 fair marks	Coherent	Recovery.
9	F.	29	Fifth	3 recent pustules	3 poor marks	Discrete	Recovery.
10	F.	18	Seventh	2 recent pustules†	2 poor marks	Confluent	Death on sixteenth day.
11	M.	17	Fifth	3 recent pustules	1 poor mark	Discrete	Recovery.
12	F.	12	Sixth	3 recent pustules	1 poor mark	Coherent	Recovery.
13	F.	16	Twelfth	3 abortive vesicles	1 poor mark	Confluent	Death on twelfth day.

* This reckoned as twelve days.

† Surrounded by a crop of small vesicles.

Analysis.—Females here also predominate; the ages range from three to twenty-nine, the majority being between fifteen and twenty. More were revaccinated on the fifth and sixth days of the incubation-period than any other, the times ranging between the third and twelfth days; the revaccination consisted mostly of pustules, and generally to the number of three. The primary vaccination was imperfect in all, in most of them of a very meagre description, both in number and quality. The variety of the disease assumed in most of the cases was the discrete form; two deaths occurred, and recovery was noted as protracted in one case.

Remarks.—Though hardly bearing on the subject of this paper, yet I would draw attention to the fact that not one of these cases was well vaccinated primarily. All the discrete cases were revaccinated within the first five days of incubation, the majority on the fifth day; in the coherent and confluent, on the other hand, the operation took place from the sixth to the twelfth day. The fatal cases were revaccinated on the seventh and twelfth days respectively, and the protracted recovery on the eighth. In most of the confluent and coherent cases, three pocks were noted; in most of the discrete, only two. Of the deaths, one showed two pustules; the other three vesicles, which were of an abortive character.

General Conclusions.—1. Primary vaccination, after definite exposure to the infection of small-pox, should be performed within three days and in four places, in order to ensure a slight uncomplicated attack, and a rapid recovery. 2. Revaccination should not be delayed beyond the fifth day after such exposure, in order to ensure a discrete attack and recovery.