of Prussia and Eugénie de Montijo. She is now in the Infirmerie Spéciale, to which she was admitted last December, at the age of 48. She has delusions that she is Joan of Arc, that she is to be burnt by the priests, that she is a daughter of Napoleon III, and that the Duchesse de Vendôme has prevented her marriage with the Duc d'Orléans. She has sexual preoccupations, she soliloquises in an agitated manner, has fits of screaming and smashes things. She utters threats against certain specified persons, and she writes incoherent letters to neighbours and to various crowned heads, complaining of her wrongs.

SYDNEY J. COLE.

The Oculocardiac Reflex (Dagnini-Aschner Phenomenon): its Use in Medicine and Psychology. (*Arch. of Neur. and Psychiat.*, January, 1921.) Naccarati, S.

The Manometric Eye-compressor [L'Oculo-compresseur Manométrique.] (*L'Encéphale*, July 10th, 1920.) Roubinovitch, J.

The phenomenon with which these papers are concerned was first reported in 1908 by Dagnini and by Aschner independently. It consists in slowing of the radial pulse, lowering of the blood-pressure and modification of the respiratory rhythm from compression of the eyeballs. It is a true reflex, having as its centripetal path the trigeminal nerve and as its centrifugal path the vagus, and, in a less degree, the sympathetic. If the sympathetic connection with the medulla is interrupted, as experimentally by section of the cervical cord, the centrifugal impulse travels only through the vagal cardio-inhibitory fibres, and the reflex is consequently exaggerated. The slowing of the pulse is not a pain response; pressure over different sensitive spots of the body does not induce the changes of pulse-rate obtainable by ocular compression.

The technique is simple. The subject is placed in the recumbent posture or sits comfortably in an arm-chair, the head lying on the back of the chair. He is allowed to rest until the pulse becomes quite regular and equal for the four quarters of a minute. Then, with the thumb and index or middle finger of the right hand, gentle pressure is exerted on the eyeballs through the closed lids. The experimenter stands at the subject's right, taking the pulse at the right wrist. A more trustworthy comparison of results is obtainable with a special instrument. That used by Naccarati is like spectacles whose lenses are replaced by wooden spoons covered with cotton; the pressure is applied with a sphygmomanometer. Roubinovitch's paper is a description (with photographs) of another; the action in this is by inflation of rubber bulbs, to which a pressure gauge is connected.

Some authors have proceeded on a crude assumption that if the pulse-rate is reduced by from five to twelve beats per minute the reflex is normal; if by more than twelve, exaggerated; if by not more than four, abolished; and if instead of a slowing there is a quickening, inverted. Such classifications are arbitrary, and do not give the real individual value, for in the same subject very different results may be observed at different times. No wonder the reports of different investigators are so discordant. On one point only is there general agreement, *viz.*, that in tabes the reflex is usually abolished. The difference in one minute

between the pulse-rate without ocular pressure and the pulse-rate with pressure should always be indicated in full, with a positive or a negative sign ; this algebraic difference should be called the "reflex index." If there is a quickening the index is negative. The pulse-rate should be stated, for a given index-value will not have the same significance in a tachycardiac as in a bradycardiac.

Naccarati reports his observations on 165 normal and 336 pathological subjects. His tables show the great diversity of the results. A single observation is worthless ; an average must be taken of the results observed at a number of different times. Slight deviations from the average index have no pathological significance. Large deviations may be found in normal states and in normal subjects, but may indicate abnormal physiological or psychological conditions, or may be expressive of pathological states. In psychology the reflex may be of use for the study of some traits the scales of which are lacking. As regards pathological states, Naccarati finds that in tabes the index is zero or very small ; exceptionally it exceeds three ; it varies little, if at all, at different times. In general paralysis also the index is apt to be small, but cases with a larger positive or negative index are much commoner than in tabes. In feeble-minded persons Naccarati does not find the tendency to a large positive index alleged by some authors. Psycho-neurotic persons, feeble-minded, and persons with organic nervous diseases do not show any substantial variations that could not be found in a group of normal subjects. In epilepsy, although a well-defined tendency to a large positive index (vagotonic reaction) is found, it is not the rule ; cases with small positive indices, with zero and negative indices, are often met with ; bromides do not reduce the index ; large variations from positive to negative are found in the same patient at different times. Hypothyroid patients tend to show a positive index, and hyperthyroid a negative ; large variations from time to time are observed. Administration of thyroid extract to the hypothyroid patient seems to reduce the index.

SYDNEY J. COLE.

Endocrine Stimulation as Affecting Dream Content. (Arch. of Neur. and Psychiat., February, 1921.) Finley, C. S.

The patient, a single woman, æt. 45, well-nourished and with a general appearance of good health, complained of extreme lassitude following an attack of influenza. Usually energetic and holding a position necessitating considerable mental and physical activity, she found it very difficult to force herself to get up in the morning ; her fatigue became less apparent as she worked until 4 or 5 o'clock, and she went to bed exhausted about 8. She had a history of previous good health ; ate and slept well and had no physical signs of disease. Her blood-pressure in the mid-afternoon, when at her best, was 90, systolic.

A course of endocrine therapy was decided on, and she was given 1 gr. of extract of whole pituitary gland each morning. At the end of a week or ten days the blood-pressure had risen to 110, systolic ; she felt better and was able to work her usual number of hours. About this time she began to have vivid dreams every night ; previously she

BJPpsych

The British Journal of Psychiatry

The Oculocardiac Reflex (Dagnini-Aschner Phenomenon): its Use in Medicine and Psychology. (Arch. of Neur. and Psychiat., January, 1921.) Naccarati, S.

Sydney J. Cole
BJP 1921, 67:373-374.

Access the most recent version at DOI: [10.1192/bjp.67.278.373](https://doi.org/10.1192/bjp.67.278.373)

References

This article cites 0 articles, 0 of which you can access for free at:
<http://bjp.rcpsych.org/content/67/278/373.1.citation#BIBL>

Reprints/ permissions

To obtain reprints or permission to reproduce material from this paper, please write to permissions@rcpsych.ac.uk

You can respond to this article at

[/letters/submit/bjprcpsych;67/278/373](http://bjp.rcpsych.org/letters/submit/bjprcpsych;67/278/373)

Downloaded from

<http://bjp.rcpsych.org/> on May 24, 2015
Published by The Royal College of Psychiatrists