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upon the internal gental
organs durig pregnancy xx







## ACTION OF QUININE UPON THE INTERNAL GENITAL ORGANS DURING PREGNANCY AND MENSTRUATION.\*

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Petitjean was the first who wrote in 1845 that he had so often seen abortion produced during the administration of quinine for intermittent fever, and Rodriguez the first also who denied Petitjean's assertion.

Ten years had passed (in 1855) when Dr. John S. Wilson described the uterine action produced by quinine; in 1860 Dr. J. H. Rich reported several cases of alarming uterine hæmorrhage speedily checked by its means. General attention had not been attracted to this subject until the appearance of an elaborate article by Monteverdi (1871), who concluded that quinine might be given with prudence to pregnant women, and that it is a trustworthy ecbolic and preferable to ergot. This paper provoked expressions of opinion from physicians everywhere, especially from those who practiced in malarious districts. They divided into two parties: those who received the opinion of Petitjean, Wilson, Rich, Monteverdi, and those who absolutely denied that quinine has the property of stimulating uterine muscular fibers—viz., the adherents of Rodriguez' opinion. As neither party has persuaded the other, there still exists a doubt in regard to this action of quinine.

For this one reason I dared to present before the London Obstetrical Society an account of three cases—all I could collect in my own country—and a fourth in which the quinine produced hæmorrhage, hoping thereby that the Fellows of this Society may have their attention attracted to this subject.

Before entering into the details of my observations, let me say that the most part of the inhabitants of Tergestures—Messina and Laconia

<sup>\*</sup> Read before the Philadelphia Obstetrical Society, February 7, 1895.

—have an intense prejudice against the use of quinine during pregnancy and menstruation.

CASE I.—Mrs. V., of Tylos, thirty years old, multipara, was eight months pregnant.

December, 1888, she came to consult me, telling me that she had intermittent fever a long time ago.

Present State.—Delicate, anæmic, nervous; liver a little hyperæmic, spleen hypertrophic, tongue a little saburral. I determined the diagnosis of an intermittent fever and gave twenty-four grains of valerianate of quinine in ten doses; ordered her to take one every half hour.

After the third dose I renewed my visit and I found the patient having pains in the renal and hypogastric regions and all the symptoms of a labor. I prescribed some narcotics, but the patient changed doctors and I could not learn the result.

CASE II.—Widow G., of Calamata, Greece; aged thirty years; was six months pregnant from a clandestine marriage; multipara, delicate, nervous. She had no other abortion nor premature accouchement while living with her husband. She used all empirical means possible to provoke an abortion but all was ineffective.

February, 1894.—They called me to see her, whom I found was attacked by influenza. It was accompanied by double broncho-pneumonia. I cured the patient in fifteen days without ordering quinine; when she was convalescent I took occasion to prescribe salicylate of quinine.

20th.—I prescribed twenty-four grains of salicylate of quinine in ten packets, to take one every hour. After the third dose I returned and I found the patient was in labor, the pains being regular and seemingly natural. I desired to supplement the other medicines and ordered opium or morphine, but without effect; she desired the premature accouchement and hid the remaining packets of quinine, in order to take them if the premature accouchement did not take place with the first three.

21st.—The patient was delivered last night.

CASE III.—Mrs. A., of Calamata, Greece; aged twenty-five; had had two children at full term.

They called me to her and said that the patient was delicate, nervous, having no special predisposition to abortion nor premature accouchement.

April 8, 1894.--She was pregnant four months for the third time.

There was slight pyrexia, but no physical signs of disease were detected.

9th.—Early in the morning she took twenty grains of sulphate of quinine, in one hour. After the last dose she felt hard pains which produced the abortion.

I have very often administered eight grains of quinine to pregnant women, in three packets, with the recommendation to take one every half hour, or every hour, and if they feel a pain after the first or second dose not to take the others; otherwise to take all. Some pregnant women have felt nothing and I increased the dose the next day; others who have felt pains I have cured with other antipyretics and antiseptics.

Also I observed, in the administration of quinine during the menstruction, sometimes the stoppage of the blood and very often its diminution.

## CONCLUSION.

From my experience till now I conclude that quinine has a certain oxytoxic action, produced by uterine contraction.

That the women who are anæmic, nervous and debilitated have a predisposition more than others.

We should never prescribe quinine during pregnancy and menstruction, in large doses, without associating it with one or other narcotic medicine unless there exist an evident contra-indication, or when we do not know the predisposition.

CASE IV.—Miss El., Sp., of Arcoch, Calamata, Greece; twenty-three years of age, having had her menstruation regularly till April, 1803.

Five years ago she suffered with hæmoglobinuria (from quinine) and since then had not taken quinine.

One of her uncles died in 1893 of hæmoglobinuria from quinine.

April, 1893.—Dr. Oconomopoulos had prescribed for her some pills of iron and quinine. She used them a few days after her last menstruation and the flow came back, whitish, irregular, with pains in the renal and hypogastric regions, and lasted twelve days. It was the first time she had those symptoms. Six days after this hæmorrhage stopped, she began again to take the same pills, and the flow returned. Therefore her parents called Dr. Alvanakes, who does not believe that quinine has an action on the uterus, and prescribed a bitter drug which increased the pains and hæmorrhage. Changed this doctor and called me when I found the patient in the following state:

Pale, debilitated, anæmic, pulse slow, strong pains in renal and hypogastric regions; the percussion in the hypogastric region reveals an insignificant dullness; and I observed an alarming uterine hæmorrhage that was checked by using antipyrine, four grammes in one day.

Afterward, for three months, her menstruation came back every twenty-seven to twenty-nine days, abundant, with six to seven days' duration, and later, till April 8, 1894, was very regular in quantity, quality and duration.

April 8, 1894.—She had had her menstruation, when by order of her ordinary doctor she used cinchona wine.

18th.—Menstruation again with pains and duration till 22d. Stopped after abstention from cinchona wine.

25th.—She called me in. By palpation and pressure she felt a little pain in the left ovary's region.

26th.—I ordered citrate of iron, 2 grammes; sulphate of quinine, 1 gramme; water, 100 grammes; to take every day two or three teaspoonfuls, viz. one after each meal, in old brandy or in wine.

27th, A. M.—I asked if she took it and she answered me that she was afraid to drink this medicine; on my recommendation she decided to take a teaspoonful after dinner and another after supper.

28th, A. M.—A teaspoonful after breakfast and another after dinner.

P. M.—She feels pain in renal and hypogastric regions. I stopped it.

29th, A. M.—A teaspoonful after breakfast and another after dinner.

30th, A. M.—A teaspoonful after breakfast and after dinner and a tablespoonful after supper.

May 1st.—She feels strong pains. I stopped it.

3d.—I make her drink again some teaspoonfuls.

4th.—She departed for the country with the recommendation to take this medicine; a teaspoonful after breakfast and after dinner and a tablespoonful after supper.

6th.—I received this letter:

"SIR: I have promised you to take account of every symptom which I could observe; according to my promise, I tell you that the day following my arrival here, my menstruation came back with so much pain that I could not find relief."

I then prescribed antipyrine three grammes in ten packets, with

the order to take each, the first five every half hour, and the others every hour, and to stop all other medicine.

## Second Letter, May 7th, Morning.

"When I began to take the packets which you sent me yesterday the hæmorrhage diminished sensibly, but the pains are nearly the same."

3 P. M.—A man told me that the patient having need to go to the water-closet, the hæmorrhage recurred and she fell to the ground from dizziness.

I prescribed ergotin, ether, cognac.

8th.—I received this letter:

"It is the fourth day to-day and the hæmorrhage exists yet, but very little."

10th.—The flow stopped.

August 22d.—She came to see me and said:

"A month ago my country doctor prescribed a little dose of quinine, and I took half; after one hour I felt renal and hypogastric pains, after two hours I saw some drops of blood on my drawers, and my urine became a little dark."

She complains of a little pain in the renal region; examining the hypogastrium by palpation and pressure I can not find any lesion. I administer *sulphate of quinine* 0.40 in three packets, to take one every half hour.

P. M.—More renal pain than in the morning.

They permitted me, for the first time, to examine the vagina, with my little finger.

Hymen intact, I felt external os uteri pointed and no other lesion.

23d.—She is better, saw some drops of blood on her drawers. It is fifteen days since she has had her menstruation. They do not permit me to examine thoroughly for the second time, by vagina, to affirm if some lesions exist or not in the uterus.

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