A NEW CLINICAL SIGN IN THE DIAGNOSIS OF THE COCHLEATE UTERUS OF POZZI

by

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SUMMARY

In over 400 cases of cochleate uterus, using the Cusco bivalve speculum, a new clinical sign has been observed. This consists of a special rotational movement of the cervix when the proper sized Cusco speculum is inserted in the vagina and opened up. Comparative study has been made in cases of uteri of different positions using the same technique. The fallacies of the new clinical sign have been described.

Introduction

The cochleate uterus of Pozzi is the name given to the acutely anteflexed uterus. Normally the angle of anteflexion, that is, the angle at the junction of the corpus uteri with that of the cervix uteri is between 135 to 145 degrees. If this angle is 90 degrees or less, it is called acute anteflexion of the uterus.

When a pelvic examination is done in a case of cochleate uterus, the corpus and fundus are felt prominently through the anterior fornix. If palpation is done placing the index finger alone in the anterior vaginal fornix, the corpus and fundus fit snugly all along the border of the distal phalanx of the index finger, as if one is wearing the uterus like a finger-stall (Fig. 1). Palpation through the lateral and posterior fornices will reveal no part of the uterus. Examination under anaesthesia will confirm the findings.

The condition can also be diagnosed by hysterosalpingogram by taking a lateral picture. Cochleate uterus can be mistaken for fibromyoma, adenomyoma, hypoplastic uterus etc.

Since 1970 I have been observing a clinical sign which is being described in this paper.

Material and Methods

The patients presented in this series number 400. They were examined in the gynaecological outpatients department of the following institutions:

(1) Institute of Medical Sciences, Banaras Hindu University, India.

(2) C.R.C. Hospital and Family Welfare Centre, Banaras, India.

(3) College of Medical Sciences, University of Maiduguri, Nigeria.

The work was started in 1970 and was finished in 1981, a span of 11 years. The patients came for gynaecological consultation and majority of them attended the Infertility clinic of the institutions mentioned.

The patients were examined by the

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standard gynaecological method, starting with full clinical history, general, abdominal and vaginal examinations, using Sim's vaginal speculum and vaginal palpation. Then, whenever cochleate uterus was suspected, the Cusco bivalve speculum was used to elicit the new clinical sign which was present in all genuine cases of cochleate uterus. As the theme of this paper is mostly concerned with description of the new sign and its fallacies, and also in order to keep the length of this paper within reasonable limits, other details about the cases are omitted.

The new clinical sign

The sign essentially consists of a very special movement of the cervix in an upward direction along the supravaginal cervix as fulcrum and is elicited by using the Cusco bivalve speculum. When after insertion of the speculum, the blades are gradually separated, the somewhat downward directed cervix raises itself up and ultimately becomes upward directed and when the blades are brought back to their original slightly opened position, the cervix returns to its original position (Fig. 2, a to f). It is as if one is raising his lowered head gradually skywards and again bringing the same down. The reason for this typical movement is not far to seek and is explained below.

With gradual opening up of the blades of the Cusco speculum, the anterior blade lies directly against the anterior wall of the body of the uterus and pushes it backwards. It is really the whole of the uterus which is moving with the internal os area as the pivot (Fig. 2, d, e and f). Viewed through the speculum, it shows the cervical movement as depicted (Fig. 2, a, b and c).

For comparative study, I have also observed the position and possible movements of the cervix in normal anteverted and anteflexed uterus, in first degree retroversion and in retroverted and retroflexed uterus, using the Cusco speculum.

In case of anteverted and anteflexed uterus and in first degree retroversion, there is no change in position of the cervix.

In case of retroverted and retroflexed uterus, however, the cervix ascends as a whole when the speculum blades are opened up and descends again to its previous position when the blades are slowly closed (Fig. 3, a, b and c). There is no rotational movement of the cervix as in the case of the cochleate uterus. The explanation of this movement is given below.

The lower blade of the Cusco speculum does not move, it is the upper blade that does. When the blades are opened in cases of retroverted and/or retroflexed uterus, the anterior vaginal wall is lifted up and the anterior vaginal fornix is considerably stretched and widened. The vaginal wall being attached to the cervix, drags it up as a whole and thus viewed through the speculum shows its ascent. When the blades are closed, the vaginal wall comes to its original state and the cervix is seen descending and assuming its original position. The posterior or inferior blade of the speculum being steady, there is not much stretching of the posterior fornix.

Thus the nature of the movements of the cervix when observed carefully using specially a Cusco type of bivalve speculum will give clue as to the position of the uterus, even before palpation is done bimanually. Usually the speculum examination aims at diagnosing lesions in cervix and vagina and perhaps no observation is made in the different types of movement of the cervix as described. A plea is made here that the observer makes note of the movement of the cervix, specially when

dealing with cases of infertility, dysmenorrhoea etc., whereby some clue would be obtained as to the position of the uterus.

Fallacies of the new sign for cochleate uterus

These are as follows:

(1) The Cusco speculum used for eliciting this sign should be of proper size for a given length of the vagina. If the vagina is long and the speculum is smaller in size, then this sign cannot be elicited although the uterus is cochleate. This is because the upper blade of the speculum cannot reach the anterior surface of the body of the uterus to give it the push which is responsible for this sign as explained before.

(2) In case of fibromyoma situated in the anterior uterine wall the sign may be positive. Such fibromyoma can be diffentiated from a cochleate uterus by history of menorrhagia, irregular periods, dysmenorrhoea (both congestive and spasmodic types), pelvic pain, heaviness and discomfort, frequency of micturition (by its pressure on the urinary bladder), infertility, abortion etc. Careful examination, especially under anaesthesia and in still doubtful cases, by palpation of the uterus on a metal dilator passed inside the uterine cavity would help in arriving at the diagnosis.

(3) I have seen the sign not elicited in 2 cases of uterus pseudodidelphys which were acutely anteverted and anteflexed. Here the reason is that there is an empty space between the two uteri where the anterior or superior blade of the Cusco speculum lies.

(4) The sign may or may not be elicited in early pregnancy when quite often the uterus is acutely anteverted and anteflexed. In pregnancy there is softening of the uterus and specially the cervico-isthmic junctional area is very soft (whereby the Hegar's sign becomes evident). Hence the body of the uterus may be pushed back by the superior blade of the bivalve speculum but it has no effect in moving the cervix.

(5) Needless to say, the urinary bladder must be completely empty before attempting to elicit this sign. A partially full urinary bladder may transmit the push of the superior blade of the speculum and slight axial movement of the cervix may occur, even though the uterus may be normally anteverted and anteflexed.

Hence it is advised that the above mentioned fallacies should be bourne in mind in eliciting this sign for diagnosis of the cochleate uterus, and then it can be expected that the mistakes would be minimum.

Reference

1. Basu Mallik, M. K. (1982): The Cochleate Uterus of Pozzi, 1st Edition, Naya Prakash, Calcutta, pp. 44-48.

See Figs. on Art Paper IV