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Research Article

Levonorgestrel Releasing Intrauterine System for the Mentally Challenged - A Pilot Study

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Abstract

Introduction: Bringing up mentally challenged girls is a difficult job especially after onset of puberty. Managing menstrual hygiene is tough and then these girls are at risk of sexual assault and exploitation. There are no clear guidelines for their management. Two major areas of concern are menstrual hygiene and risk of pregnancy. Insertion of Levonorgestrel releasing intrauterine system is one of the options which can take care of these problems.

Materials and Methods: Eight mentally challenged girls or women who were brought with unwanted pregnancy were included in the study. The parents and care takers were counseled about future problems and were suggested insertion of device to take care of menstruation and contraception in future after termination of pregnancy.

Results and Observations: Average age was 16.1 ± 3.06 years. Two were in first trimester and six in second trimester, pregnancy was confirmed by ultrasonography. First trimester pregnancies were terminated by surgical methods whereas second trimester pregnancies were terminated by medical methods as per standard guidelines. Parents of all the cases were counseled before and after termination about insertion of the device, seven gave their consent. These seven cases have been on follow up for a period of 6 months to 32 months.

Conclusion: These mentally challenged girls can be managed with inducement of elective or therapeutic amenorrhea; which can be achieved by medical or surgical ways. Levonorgestrel releasing intrauterine system was found to be very effective in seven cases where it was inserted after induced abortion.

Keywords: *Mentally Challenged; Therapeutic Amenorrhea; Pregnancy*

Introduction

Bringing up mentally challenged children is a very difficult job for the parents and difficulties increase after onset of puberty [1] when their sexuality also is to be handled [2]. Handling girls is more challenging as managing menstrual hygiene is tough and then these girls are at risk of sexual assault and exploitation. The gynecological problems among these girls have been highlighted by Huovinen KJ [3]. Managing the problems especially the gynecological problems [4] of these girls is trying for parents and care givers. Their management has

not been only a subject of debate and controversy [5]; but it has led to many unethical practices. These girls and women need thoughtful and well-coordinated team work for their management; they are subject to many disparities as they are not mentally competent to make their own decisions [6]; hence whatever is done should be for their good and done in good faith. There are no clear guidelines for their management. Two major areas of concern are menstrual hygiene and risk of pregnancy. Performing a hysterectomy can solve both these problems but this particular irreversible procedure has been the most controversial decision and subjected to great criticism [7]. Some girls are brought to hospital with suspicion or confirmed diagnosis of pregnancy. Not only Medical Termination of Pregnancy (MTP) is advisable in these cases; there is need to take some measures preferably reversible ones so that the same situation does not arise in future and menstrual problems also become manageable. Insertion of Levonorgestrel releasing intrauterine system (IUS) or device is one of the options. A small study was conducted to find out the acceptability of this device and compare with other alternatives mentioned in literature.

Materials and Methods

This small study was conducted in two large size hospitals; one an Indian Armed Forces service hospital and the other a civil district government hospital located in Andaman and Nicobar islands; India. Mentally challenged girls or women who were brought with unwanted pregnancy were included in the study. Only a small number of eight cases were included as the condition is not common. MTP was performed as per the Indian MTP Act 1971. The parents and care takers were counseled about future problems and were suggested insertion of IUS to take care of menstruation and contraception in future. Seven were willing and IUS was inserted. All cases have been under follow up for a variable period of time. Their demographic and clinical data were collected, compiled and compared with literature.

Results and Observations

Eight mentally challenged cases with unwanted pregnancy were included in the study. Youngest case was thirteen years and oldest twenty three years. Average age was 16.1 ± 3.06 years. Two were in first trimester and remaining six were in second trimester. Four cases were brought by their mothers/parents, three were referred by psychiatrist and one case was brought from a welfare home. All the cases were in receipt of financial allowance from government for having mental disablement of more than forty percent. In view of their psychiatric condition they were admitted with one attendant. Pregnancy was suspected by mothers in five cases due to delayed periods or noticing lump in the abdomen. In three cases pregnancy was suspected by psychiatrist and care taker as a lump was visible in the lower abdomen. Pregnancy was confirmed in all cases by ultrasonography in the outpatient department; urine pregnancy testing was not considered necessary in any of the cases as the ultrasonography was available. Two girls were on different multiple antiepileptic drugs. First trimester pregnancies were terminated by surgical methods whereas second trimester pregnancies were terminated by medical methods; by oral use of Mifepristone and vaginal route of Misoprostol as per standard guidelines [8].

Informed consent of guardians was obtained for MTP and IUS insertion where agreed to. All second trimester pregnancy cases aborted with in twenty four hours of administration of first dose of Misoprostol. All the cases could be managed with cooperation of parents and hospital staff; none of them required any sedative for administration of medications. Parents of all the cases were counseled before and after termination about insertion of IUS; seven gave their consent but one refused. Parents of one girl requested for hysterectomy on their own but they could be convinced for IUS insertion in place of hysterectomy. Seven cases where IUS was inserted have been on follow up for a period of six months to 32 months. Three cases had developed amenorrhea and four had oligomenorrhoea/hypomenorrhoea, all the cases had occasional spotting; this spotting was not unmanageable. The satisfaction level of all the parents was very high. No attempt was made to investigate the circumstances which lead to these pregnancies but parents were counseled about risk of sexual abuse hence to remain vigilant. Medico legal formalities were completed where ever indicated.

Discussion

Mentally challenged individuals with learning disabilities, individuals with intellectual disability or mentally retarded are interchangeable terms for a condition that is characterized by significant limitations both in cognitive functioning and in adaptive behaviour; the condition originating before the age of 18 years. Mentally challenged girls and their parents or care givers face multiple problems. Onset of puberty and fertility are usually normal unless associated with certain CNS conditions. Decisions have to be taken by others for the welfare of these girls. It is the duty of every doctor to make women as partners in decision making in every situation but this may not be possible in girls or women who are not competent to make decisions themselves. These decisions have to be taken by parents, guardians, or the care takers if staying in an institute caring for these cases and at times permission may be required from the court [9]. Managing menstruation and menstrual hygiene [10] along with the risk of self-injurious behaviour during menstruation and coerced sex resulting in unwanted pregnancies are important issues to be considered once puberty sets in. These issues can be managed with inducement of elective or therapeutic amenorrhea; which can be achieved by medical or surgical ways. The medications which have been tried are Medroxy Progesterone Acetate (MPA) injections [11], GnRH analogues, oral progestogens, combined pills taken continuously; can cause amenorrhea and prevent pregnancy too. Performing sterilization [12-14] to prevent pregnancy has been a subject of controversy all over the world and has been used for negative eugenic indications [15,16].

Levonorgestrel releasing intrauterine system appears quite satisfactory [17,18] and meets many requirements which one desires in such cases. This device is progestogenic and antiestrogenic hence it does not allow endometrial proliferation and may finally result in endometrial atrophy and then therapeutic amenorrhea. There is no need for daily intake of medicine like combined oral contraceptive (COC) pill or repeated visits to the doctors as required in administration of GnRH analogues or MPA injections. This resultant amenorrhea or oligomenorrhoea helps in handling menstruation and associated menstrual problems and prevention of pregnancy. The method is reversible and does not cause any long term systemic or local side effects or complications. All the cases were followed up for many months and all parents were satisfied.

Some cases need contraception as many mentally challenged women may be on drugs which are teratogenic [19]. Two cases in our short series were on antiepileptic drugs though this was not the indication for MTP or inducing therapeutic amenorrhea as both the girls were unmarried. Contraception is required as preventive measure when these girls are at risk of sexual exploitation and abuse as happened in all our cases. Though it is the duty of parents and care givers to ensure the safety of these girls regarding rape and sexual assault but this cannot always be avoided as it happened in our cases. The parents and care givers were not aware of the circumstances which led to pregnancy hence providing contraceptive advice [10] in advance to parents and care givers should be considered in all cases and final decision left to them [20].

The final choice [4] should be the one which is the 'least restrictive option' it should be less invasive and be reversible. IUS fulfills all these criteria. Most of the cases can be managed medically and very few may require surgery and that should be the last option [21]; it was also mentioned by the author that menstrual and contraceptive management for women with intellectual disability is and should be similar to the general population. Hysterectomy [5] can be a solution to all the gynecological problems in these girls but it should be the last option and for indications like menorrhagia or fibroid etc. Hysterectomy is not justified for prevention of pregnancy. Though Sheth and Malpani [7] had opined that in our Indian settings; hysterectomy may be an easier and more practical option due to poverty, illiteracy and financial reasons but today with the availability of other options it is rarely required. If planned then decision should be by a board and not by a single treating doctor [22].

In our small study all the cases reported with unwanted pregnancy requiring MTP, after MTP was performed; the parents were offered the option of insertion of IUS. It was genuinely necessary as these cases were of proven fertility, had already been victimized once and would remain at risk in future. This may be offered to other mentally challenged cases as the first option before these girls get into

problems of sexual abuse resulting in pregnancy. Surgical options should be considered a last resort when symptoms are severe and other treatment modalities have been tried and failed. When several options are available that may confer a similar benefit to such a person, the least injurious must be selected. Nowhere are the ethical and legal considerations of treatment decisions more important, or more complex, than in the management of mentally challenged women.

Limitations

The case series is small as the condition is not common.

Disclosure

Author reports no conflict of interest in this work.

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