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Review Article

Induced labour in pregnancy with congenital abnormalities: clinical indications or patient demand

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ABSTRACT

Congenital abnormalities are a nightmare for a pregnant woman. However, congenital abnormalities are divided into several conditions. The state of major disability is the worst situation, with the possibility of disability and even postpartum death. The disability is still a pregnancy that can cause complications that have a bad effect on the mother, so the pregnancy is often induced labor for fear of endangering the mother even though the complications have not yet appeared. In addition, it often happens because the family refuses the presence of a child with a disability. Criteria and references for intrauterine anomalies have been made by various countries and organizations, with the treatment taking into account clinical, psychosocial, religious, and legal aspects. However, this reference is not always easy to implement due to various factors, so that the decision to induced labor or induced abortion is always based on the advice of the medical team and family approval without leaving the legal aspect. Parental consent is important because not all pregnant women agree to induced labor of pregnancy even though it is a major disability and threatens postpartum death. On the other hand, if the defect can be corrected, then a clinician must be able to maintain the pregnancy and refuse unnecessary attempts to terminate the pregnancy.

Keywords: Congenital abnormalities, Induced labour, Parental consent

INTRODUCTION

Indications of induced labour or induced abortion for congenital abnormalities in the world still have not agreed to determine the best, but some countries have made clinical references as a guide for pregnancy induced labour.[1,2] The induced labour of the characteristics of major disability that are "feasible" for the induced labour of pregnancy is still controversial, especially in terms of sociocultural, religious, and legal.[3,4] Such a situation makes many clinicians see only from that point of view, so that it becomes a barrier in handling that prioritizes the interests of pregnant women. For example, from the point of view of some or maybe all religions, giving birth to a surviving anomaly fetus only the presence of disability is prohibited.[5] Induction of labour can be done if there is still a chance that the pregnancy could cause conditions that are dangerous for the mother and fetus.[6] This means that if in an emergency, some religions provide opportunities for induced labour of pregnancy; even the law also provides such opportunities if it threatens life.[7] However, it is legal when performed in an emergency, but often severe congenital abnormalities are not in the emergency situation.

The clinic's point of view is sometimes different from the religious and legal point of view, so it is necessary to discuss severe deformities that have a bad prognosis for the fetus.[8,9] A pregnant woman while in pregnancy condition has a chance of obstetrics complication if the fetus is in a normal condition or there are severe abnormalities.[10] So, from the point of view of a pregnant woman, the situation concerned is still at risk. If the

pregnancy is terminated, she will soon be free from the risky pregnancy.

Major disability

By definition, several researchers and diagnostic centers globally point to the criteria for major disability by definition and a list of similar abnormalities, as examples given below.

Indonesian Maternalfetal Medicine Association

Major abnormalities or anatomical abnormalities are clearly visible on ultrasound and have medical, operative, or cosmetological importance with an influence on pain and death (e.g., hydrocephalus and anencephalus).

Minor abnormalities or disorders that have no serious medical, operative, or cosmetological meaning and have no effect on normal life expectancy or lifestyle (e.g., umbilical hernia and micropenis).[11]

World Health Organization

According to WHO, lethal (e.g., anencephaly); severe abnormalities are medical interventions which if not performed, will cause disability or death (e.g., hypoplastic left heart syndrome); and mild abnormalities are the abnormalities that require medical intervention but have good life expectancy (e.g., labioschizis).[3]

Royal College of Obstetricians and Gynaecologists

In practical terms, Royal College of Obstetricians and Gynaecologists provides guidance for induced labour of pregnancy in 3 situations, as follows.

Situation without opportunities or "no chance". The fetus has a severe abnormality, so it is decided to be terminated to reduce the possibility of protracted suffering if born alive. In this situation, including the fetus, there can still be therapy but with very low success or no method of therapy.

The situation is for no reason or "no purpose". Although the fetus is still possible to survive, the postpartum physical or mental abnormalities are so severe that there is no reason to wait for delivery if the result will be in good condition.

The situation of not wanting to be born or being 'unbearable'. Families feel they are facing irreversible diseases with further treatment that the family cannot bear economically or socially. Refuse further treatment, regardless of medical opinions that there may still be therapeutic efforts and benefits.[12]

The detection rate of congenital abnormalities depends on several factors, for example, the severity of the abnormality, the experience of the ultrasound operator, and the ultrasound device used. So, some abnormalities often go undetected at the basic service level on examination in the clinic.[13] Below are some examples of abnormalities with a percentage detection rate. For example, Royal College of Obstetricians and Gynaecologists includes anencephaly and gastroschisis, which will be diagnosed in 98% of cases, so this disorder includes severe congenital abnormalities that are easily detected, in contrast to heart abnormalities that are only detected by 50% because of the difficulty of detecting congenital heart disease or the limited operator's ability to detect them.[12]

Chromosomal abnormalities can be determined based on pathognomonic marks on ultrasound examination in clinical, but even so it will be more accurate when the karyotyping examination is performed.[14,15] In the state of severe chromosomal abnormalities can be diagnosed with multiple congenital abnormalities.[16] For example, in trisomy 21 can be heart, gastrointestinal and long bone growth abnormalities. induced labour of the diagnosis of congenital abnormalities, especially when in doubt, it would be wise to refer a second opinion to another more competent colleague.[17] Diagnostics and counseling for further treatment may be more directed and understood by the family if a diagnosis and prognosis can be determined.

In the diagnosis of congenital abnormalities, especially when in doubt, it would be wise to refer a second opinion to another, more competent colleague. Diagnostics and counselling for further treatment may be more directed and understood by the family if a diagnosis and prognosis can be determined. The Indonesian Maternalfetal Medicine Association in 2010, suggested medical services be provided to patients with infant congenital abnormalities expected based on: medical profession's standard decisions, legal standard decisions, spiritual standard decisions, decisions on ethical and moral standards, and patient expectations and patient satisfaction.[11]

When is induced labour?

All of the above circumstances should be used as a reference in making decisions and after discussions with experts, patients, and families.[2,12,18] Pregnant women and their families must consider psychological, socioeconomic, religious, and legal issues when dealing with congenital disorders during pregnancy. In general, the treatment of congenital disorders described from a clinical point of view is as follows.

Cannot live outside the uterus

The state of severe congenital abnormalities not only physical abnormalities but can also affect the body's metabolism or others.[19] So that congenital abnormalities are not only physically visible but must be considered postpartum life-ability. The fetus during intrauterine is still supported by the placenta and maternal assistance, so it can often still live to term.[20] Nevertheless, shortly after birth

and after the umbilical cord is cut, the fetus must independently support itself without placental or maternal assistance.[21] For example, in severe heart abnormalities, usually while the fetus is born, the baby can still cry loudly and score well, but subsequently has difficulty breathing, then experiences severe hypoxia and dies in minutes or hours. Another severe disorder that cannot live long in the majority of labour is anencephal, so the option of induced labour may be wise to offer especially when detected in the first trimester of pregnancy.[22]

The type of congenital abnormality is very important to determine the prognosis at the time of examination. The experience of an obstetrician using ultrasound is challenged to determine the exact diagnosis in order to determine an accurate prognosis.[23] Experiences of the treatment of severe congenital disorders show that not all mothers or families agree to terminate their pregnancy.[24] Some pregnant women want to continue pregnancy until after term despite knowing that their child is in a severely disabled condition for various reasons. So, the decision to terminate the pregnancy is not only clinically or medically instructed but determined by family approval.[25]

Therapy can be done with better prognosis if pregnancy is aterm

Congenital disorders are divided into several circumstances based on prognosis.[26] This prognosis is based on the potential for therapy that can be done postpartum, in addition to the prognosis of fetal death at the time of postpartum or intrauterine.[27] The potential of therapy is very important to convey to the family and also affects the decision to terminate the pregnancy.

Some congenital disorders cannot be corrected postpartum due to various situations, such as human resource factors, medical equipment, clinical knowledge and skills, and therapy costs.[28] If the type of congenital abnormality that can be monitored during intrauterine and assessed can be carried out, it is recommended not to be terminated before reaching the age of aterm pregnancy.[3] The decision to maintain the pregnancy until term must also be accompanied by the possibility of financing that can be borne by family, insurance, or institutions.[29] This is important because, in some cases, anomaly correction cannot be done because of the retreat of the family due to limited funds or not covered by insurance.

Worsening abnormalities: induced labour of pregnancy

Another condition that must be considered for congenital disorders is the adverse influence on pregnancy.[30] Progressivity of the disorder can increase, triggering the decision to be born sooner before aterm.[31] In the correctable state of abnormality, this is a very big concern because correction efforts can save lives or organ function.[3] This monitoring requires competent clinical competence for this, because if there is an aggravation, it must be determined immediately at the time of delivery. Determining the timing of labour is a challenge because if it is too fast, there may still be severe preterm delivery, but if it is too late, it will result in fetal death.

Prevention of worsening: intrauterine therapy

Invasive intrauterine therapy is another option to prevent worsening.[32] Examples of intrauterine therapy that is often done are vesicoamniotic shunting in cases with lower urinary tract obstruction (LUTO).[33] Cases of LUTO occur a build-up of fluid in the kidneys, and it is feared that if fetal urine is not flowed, it will add to the kidney damage, so a shortcut flow from the bladder to the amniotic cavity will reduce further kidney damage. Other therapies, such as laser ablation in cases of twin-to-twin transfusion syndrome, can improve heart function in recipients and maintain blood flow in donors.[34] Although beneficial, invasive therapy is relatively risky for the mother or the pregnancy itself.[35] The potential for rupture of amniotic fluid or fetal death as well as injury to the mother should be considered.[36] In addition, only certain health centers provide this advanced health service

Dystocia

Pregnancies with congenital abnormalities often cause the possibility of dystocia when born through the vagina. Such circumstances are often debated, as in the case of hydranencephaly, or hydrocephalus. When the biparietal diameter is above 10 cm or the head be enlarged, then the potential for dystocia will increase. Embryotomy action can be performed, such as punction on the head of the fetus. At this time, the tendency of embryotomy action tends to be abandoned, and caesarean section is the main choice, although embryotomy can still be used in some cases.[37]

In some cases that have a poor prognosis, such as hydrocephalus, the tendency to develop dystocia when the head fluid is very massive, resulting in the size of the fetal head tending to enlarge.[38]

Vaginal delivery is performed even though it is still premature, and the reference is a measurement of head circumference to avoid the occurrence of pelvic head dysproporsi.[39]

CONCLUSUION

In conclusion, the induced labour of pregnancy in cases of congenital abnormalities is determined by pregnant women and their families after considering psychological, socioeconomic, religious, and legal issues. While clinicians only help choose what action is right for their pregnancy because some congenital abnormalities can still be corrected and have a good prognosis.

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