Direct treatment of the fetus

Moderator: J.W. DUDENHAUSEN

Commentators: K. ADAMSONS

M.R. HARRISON C.H. RODECK

Historical and ethical aspects of direct treatment of the fetus

J.W. DUDENHAUSEN

During the last 20 to 25 years perinatal medicine has developed significantly, and the main points of interest have been the diagnosis of the well-being of the fetus. There were only some new aspects in treatment. For instance the RH disease and the intrauterine blood transfusion. But the main stream of all the scientific investigations was concerned with diagnostic problems. The technical development of sonography, fetoscopy, amniocentesis, amniography and fluid collection enable us to make a prenatal diagnosis of the defects of the fetus. And with these diagnostic possibilities we stand today on the brink of an age when direct therapy of the fetus can be further developed.

Although I believe that we are on the brink of a new deal for the fetus as a treated patient, I would like to point out that a direct therapy for unborn infants did in fact appear as far back as 1928, written by SCHWARCZ (1). He suggested transabdominal application of drugs in cases of fetal asphyxia. This procedure - at that time daring and as can be seen from the original, not particularly successful - has long since been forgotten.

I am not sure that all facts reported today in this panel will be good news to most physicians and members of the public. But I think we have to study the opportunities for fetal treatment and we have to give enough support to research and the number of opportunities for fetal treatment will multiply.

In this panel discussion we all agree that direct treatment of the fetus - in particular fetal surgery - involves considerable ethical problems. Firstly there are conflicts to do with the infant having a defect which possibly can be corrected, and then on the other hand we have the interests of the mother who has to give permission for the therapy to be done. It is very difficult to say what the dangers of intrauterine therapy are, and above all how successful the therapy is. Let us hope that more experience during the next few years will provide the basis for correct information of parents.

10

Furthermore we have the problem that for many patients the alternative to surgery is the artificial abortion. Let us hope that not ecclesiastical and religious attitudes, moral decisions force us to consider the fetus not as a patient.

We see another problem in the fact that good, successful fetal therapy depends on diagnostic and therapeutic research. The line between research and medical necessity has certainly not yet been drawn up.

In the end one must ask oneself whether the emphasis should be shifted from social and economic factors in medicine to the individual problem of direct fetal therapy. My personal view is that the individual treatment of a correctable defect should be performed on an individual as early as possible. Economic considerations should remain in the background to the medical decisions.

Let us look at the future of intrauterine treatment. The more inventive diagnostic and therapeutic procedures involve significant risks. A great deal of clinical and laboratory experience will be required to establish rules and guidelines which are truly safe, necessary and possible. In the meantime it is important to maintain a healthy scepticism towards fetal treatment. Because a procedure can be done, does not mean that it should be done. A fetal malformation of any type should never be treated simply because it is there, and never by someone unprepared for this terrible situation.

Bibliography

1. SCHWARCZ, R.: Die transuterine Einspritzung in den Fötus. Zbl.Gynäk. 52 (1928) 817

Joachim W. Dudenhausen, M.D. Professor of Obstetrics and Gynecology Mariendorfer Weg 28 D-1000 Berlin 44