

Termination of Pregnancy for Medical Indications under Sec. 218a Para. 2 of the German Criminal Code – Real-life Data from the “Gießen Model”

Schwangerschaftsabbrüche aus medizinischer Indikation gemäß § 218a Abs. 2 StGB – Daten aus der Praxis des „Gießener Modells“

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ABSTRACT

Background Following the legal provisions on the termination of pregnancies in Art. 13 of the SFHG (Law on the Assistance for Pregnant Women and Families, passed on 27.07.1992, BGBl. I, p. 1398) the so-called embryopathic indication for termination was abandoned. Since then, sec. 218a para. 2 of the German Criminal Code (StGB) states that for late terminations, i.e., terminations after the 12th week of gestation post conception, the pregnant woman must be in exceptional distress “according to medical opinion”.

Method Between 01.05.2012 and 25.07.2016, a total of 160 pregnancy terminations were carried out in Gießen University Hospital under sec. 218a para. 2 StGB. The following data were obtained from

the patients’ files: age of the pregnant woman, number of pregnancies, type of fetal disease or malformation, time of diagnosis, medical and psychosocial counseling given to the pregnant woman, time of termination or delivery, type of termination, fetal gender.

Results 160 pregnant women (mean age: 31.6 years) underwent termination of pregnancy between the 13th – 37th week of gestation. Chromosomal anomalies were diagnosed prenatally in 60 cases, and anomalies were diagnosed on ultrasonography in 100 cases, with the preponderance of cases presenting with developmental disorders of the central nervous system and cardiovascular system.

Conclusion In addition to recording intrauterine fetal disorders, when pregnancies are terminated under sec. 218a para. 2 StGB, treating physicians are expected to give plausible reasons why “according to medical opinion” the pregnancy represents a danger to the life of the pregnant woman or of grave injury to her physical or mental health and enter these reasons in the patient’s medical records.

ZUSAMMENFASSUNG

Hintergrund Mit der gesetzlichen Regelung des Schwangerschaftsabbruchs durch Art. 13 des SFHG (Schwangeren- und Familienhilfegesetz vom 27.07.1992, BGBl. I, S. 1398) wurde die sog. embryopathische Indikation verlassen. § 218a Abs. 2 StGB verlangt seither für einen sog. Spätabbruch nach der 12. SSW p. c. eine „nach ärztlicher Erkenntnis“ gegebene Notlage der Schwangeren.

Methodik Vom 01.05.2012 bis zum 25.07.2016 wurden im Universitätsklinikum Gießen 160 Schwangerschaftsabbrüche gem. § 218a Abs. 2 StGB vorgenommen. Den Krankenunterlagen wurden folgende Daten entnommen: Alter der Schwangeren, Zahl der Schwangerschaften, Art der Erkrankungen des Feten, Zeitpunkt der Diagnose, medizinische und psychosoziale Beratung der Schwangeren, Zeitpunkt des Spätabbruchs und der Entbindung, Art des Schwangerschaftsabbruchs, Geschlecht des Feten.

Ergebnisse Bei 160 Schwangeren, Durchschnittsalter 31,6 Jahre, wurde in der 13.–37. SSW die Schwangerschaft abgebrochen. In 60 Fällen waren pränatal chromosomale Anomalien diagnostiziert worden, in 100 Fällen wurden sonografisch Anomalien mit dominierenden Entwicklungsstörungen des ZNS und des kardiovaskulären Systems diagnostiziert.

Schlussfolgerung Neben der Dokumentation der intrauterinen Erkrankung des Feten wird beim Schwangerschaftsabbruch gem. § 218a Abs. 2 StGB von den behandelnden Ärzten erwartet, dass die „nach ärztlicher Erkenntnis“ gegebene Gefahr für das Leben oder die Gefahr einer schwerwiegenden Beeinträchtigung des körperlichen oder seelischen Gesundheitszustands der Schwangeren in den Krankenunterlagen plausibel dargelegt wird.

Introduction

According to the federal public health reports issued for the Federal Republic of Germany, in 2015 a total of 96442 pregnancies were terminated prior to the 12th week of gestation (GW) in accordance with existing regulations on counseling, with a further 2795 terminations carried out after the 12th GW post conception (p. c.), of which 1060 were performed in the 12th–15th GW, 617 in GW 16–18, 484 in GW 19–22, and 634 after the 22nd GW [1]. Under sec. 218a para. 2 StGB, termination of a pregnancy for medical indications is permissible even after the 12th GW p. c.:

(2) The termination of pregnancy performed by a physician with the consent of the pregnant woman is not unlawful if, after considering the pregnant woman's current and future circumstances, the termination of pregnancy is medically indicated to avert a danger to the life of the pregnant woman or avert the danger of grave injury to the physical or mental health of the pregnant woman, and the danger cannot be averted in any other way which would be reasonable and tolerable to the pregnant woman.

What these formulations mean in practice requires a differentiated analysis with regard to the step-by-step procedure.

The wording of the law requires that “according to medical opinion” the pregnant woman's situation corresponds to the requirements of sec. 218a para. 2 StGB [2, 3]. In practice, a differentiated medical prenatal diagnosis (ultrasound, invasive and non-invasive genetic diagnosis) and counseling of the pregnant woman will precede such “medical opinion” [4–10]. It is only possible afterwards to come to a decision for or against terminating the pregnancy, and currently there are no time limits prior to the due date on terminating the pregnancy [11, 12].

This places an obligation on the treating physician which – if the physician carries out this obligation – could, in practice, lead to conflicts with law enforcement authorities if the authorities are unable to find a reasonable basis for the termination of the pregnancy in the patient's medical records and require that further facts must be provided [2]. At the same time, there is relatively little data on the real-life practice of pregnancy terminations under sec. 218a part. 2 StGB in Germany. There are a number of individual studies and publications from other countries on the problem of so-called late terminations [13–16].

In an attempt to look beyond individual cases, data from a total of 160 pregnancy terminations for medical indications were collected to serve as a basis for a discussion about the time limits in which pregnancy terminations are permissible and provide additional information.

The aim of this study was to present, in addition to the aforementioned analysis of the pregnancy terminations performed, an algorithm of the “Gießen model”. The algorithm has made it possible to achieve a high degree of standardization in clinical and administrative procedures when carrying out medically indicated terminations and, not least, to create legal certainty for the treating physicians.

► **Table 1** Number of pregnancies and deliveries of 160 pregnant women who had late termination of pregnancy (time period: 01.05.2012 to 25.07.2016).

Gravidity	Parity	Number	Total (%)
G1	P0	61	61 (38)
G2	P0	16	57 (36)
	P1	41	
G3	P0	2	25 (16)
	P1	11	
	P2	12	
G4	P0	0	6 (4)
	P1	3	
	P2	2	
	P3	1	
G5	P0	0	7 (4)
	P1	3	
	P2	1	
	P3	1	
G6	P4	2	2 (1)
	P0	0	
	P1	0	
	P2	0	
	P3	2	
G7P3; G9P4	P4	0	2 (1)
	P5	0	

Material and Methods

Between 01.05.2012 and 25.07.2016 160 pregnancies were terminated under sec. 218a para. 2 of the German Criminal Code (StGB) in the gynecological department of Gießen University Hospital. This corresponds to between 3 and 4 terminations per month for a very large catchment area. The following data were obtained from patients' medical records: age of the pregnant woman, number of pregnancies, type of diagnosed fetal disorder, time of diagnosis, medical and psychosocial counseling of the pregnant woman or couple, time of the termination, type of pregnancy termination, time of delivery, and gender of the fetus. A retrospective evaluation of data was done using descriptive analysis. Pregnancies with a gestational age of less than GW 20 + 0 post menstruation were carried out as induced abortions by cervical priming with prostaglandin. If the fetus had a gestational age of more than GW 20 + 0, feticide was carried out by intravascular or intracardiac instillation of potassium chloride prior to the induction of labor following prior maternal and fetal analgesia with piritramide. Documentation of prenatal images and findings was done with Viewpoint (GE Healthcare). As directed by the Department of Public Prosecution, a forensic postmortem was carried

► **Table 2** Number and distribution of chromosomal anomalies in 60 out of 160 fetuses (37.5%).

Chromosomal anomaly	n = 60
Trisomy 13	10
Trisomy 18	9
Trisomy 21	27
Partial trisomy	1
Unspecific deletions	4
Monosomy	5
Other	4

► **Table 3** Malformations of organ systems in 100 of 160 fetuses (62.5%).

Affected organ system	n = 100
CNS	51
Heart	15
Lungs	3
Fissure formations	2
Urogenital tract	16
Skeleton	7
Neoplasia	3
Metabolic processes	1
Placenta	1

out post partum, and a postmortem or death certificate was issued, with the cause of death correctly stated as unnatural [17].

Results

Demography and range of fetal anomalies

Of the 160 late terminations, 84 were male and 64 were female fetuses, and there was one twin pregnancy. In twelve cases, the fetal stage of development meant that it was not possible to determine the gender of the fetus macroscopically. The age of the pregnant women ranged from 19 to 47 years (mean: 31.6 years). 61 primiparae, 57 secundiparae, 24 triparae and 18 multiparae took the decision to terminate their pregnancy (► **Table 1**). At the time when the pregnancy was terminated, the fetuses were aged between 13–37 weeks of gestation (mean: GW 23.4).

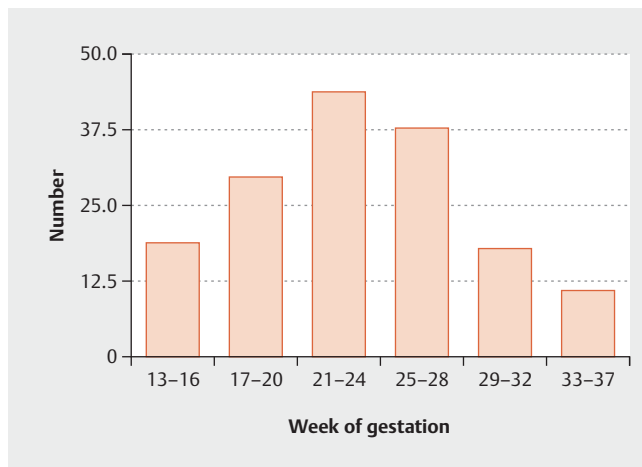
In 60 cases, chromosomal anomalies were diagnosed prenatally by karyotyping. Trisomy 21 was found in 27 cases, and trisomy 13 and trisomy 18 were diagnosed in ten and nine cases respectively. Unspecific deletions or translocations were found in four cases, there were five cases with monosomy (monosomy 18, Turner syndrome), other chromosomal disorders were present in four cases, and there was one case with partial trisomy 1q (► **Table 2**).

Organ anomalies were detected on ultrasound in the remaining 100 fetuses with disorders (► **Table 3**). The most common anomaly was disorders of the central nervous system (CNS) with anomalies found in 52 fetuses, including Arnold-Chiari syndrome, sometimes combined with spina bifida or hydrocephalus. Other detected defects included anencephaly, holoprosencephaly and microcephaly; there was one case of pronounced loss of brain tissue with tumorous changes to the CNS and macrocephaly. Fifteen fetuses showed signs of cardiovascular disease such as valve atresia, large vascular malformations, hypoplastic left heart syndrome, and ventricular septal defects. Three fetuses presented with pulmonary anomalies indicating CHAOS (congenital high airway obstruction syndrome), pulmonary hypoplasia with anhydramnios and CCAML (congenital cystic adenomatoid malformation of the lung). In some cases the urogenital tract was affected, with malformations such as LUTO (lower urinary tract obstruction), renal agenesis and multicystic renal dysplasia diagnosed in

16 fetuses. Two fetuses showed pronounced forms of gastroschisis with protrusion of internal organs. Skeletal malformations were detected in seven fetuses and included thanatophoric skeletal dysplasia, multiple congenital arthrogyrosis and fibular hemimelia. Teratoma tumors were detected in three fetuses in utero. In one fetus cystic fibrosis was detected by molecular genetic diagnosis, and one fetus suffered from the effects of early placental insufficiency with fetal centralization and oligohydramnios. In the latter case, the prospective parents were so severely affected that despite the expected intrauterine death of the fetus, they opted for termination of the pregnancy.

Time between diagnosis and termination of pregnancy

The medical files show that the time between the first communication of the diagnosis to the pregnant woman or affected couple and the termination of the pregnancy, either through feticide following potassium chloride (KCl) injection (n = 118) for fetuses with a gestational age of more than 20 weeks of gestation or through induced abortion following prostaglandin priming (n = 42), ranged from 3 to 101 days. The average time from diagnosis to termination was 17 days. The long interval of 101 days involved a pregnant woman, where attempts were initially made to treat the fetus prenatally. The fetus had been diagnosed with LUTO, and a shunt was placed for urinary diversion. Following a deterioration in renal retention values and a decrease in amniotic fluid it became clear that the infant could not be expected to have adequate renal function postnatally. The probability that the infant would require dialysis postnatally coupled with the necessity for a kidney transplant was experienced by the pregnant woman as a significant stressor. Another long interval between diagnosis and termination of the pregnancy occurred in a multiple pregnancy which was already in an advanced gestational age; in this case the long interval to termination was to avoid putting the outcome of the overall pregnancy at risk because of potential complications. The reported time between feticide or the start of induced abortion and the delivery or abortion ranged from 0 to 13 days; on average, the interval was 2.6 days. ► **Fig. 1** shows the distribution of delivery times for the 160 late terminations across the different weeks of gestation.



► **Fig. 1** Distribution of pregnancy terminations grouped according to the week of gestation at the time of the termination.

Counseling and indications

Psychosocial counseling was recommended or arranged in all cases. Only 35 mothers/couples rejected psychosocial counseling.

In most cases the indication to terminate the pregnancy was made by the attending prenatal physician, in some cases where genetic anomalies were present by a specialist for human genetics after detailed consultation and discussion with the patient. In some cases assessment by a consultant psychiatrist was initiated. In all cases, the case history was discussed by a team of physicians during the regular scheduled meeting of physicians working at the hospital and the consent of the director of the gynecological department was obtained.

After communicating the diagnosis, several interdisciplinary consultations were held with the pregnant woman; depending on the fetal malformation consultations were attended by specialists for neonatology, neuropediatrics, neurosurgery, pediatric cardiology or human genetics. The communication of the diagnosis was always coupled with the offer of psychosocial and psychosomatic counseling.

After the feticide or induced abortion, the gynecological department passed on the information to the appropriate Public Prosecution Department as had been previously agreed.

Discussion

The German legislature abandoned the previous embryopathic indication for the termination of pregnancies after 12th week of gestation post conception, and now the medico-social indication only focuses on the situation of the pregnant woman [6,8,12,18]. This was done to avoid giving the impression that the expectation that the infant would be disabled was a sufficient justification for terminating a pregnancy [18].

The accusation has been made that the formulation chosen for sec. 218a para. 2 StGB lacks precision and does not specify a cut-off time after which termination of the pregnancy would be un-

lawful. A careful analysis of the guidelines given in sec. 218a para. 2 StGB shows that documenting the proceedings in detail is a sensible approach. In Gießen the following approach based on previous publications of the standard practice followed in Kiel has proven to be successful [3]:

1. The starting point is that the objective findings of prenatal diagnosis (ultrasound, prenatal genetic diagnosis) clearly demonstrate fetal anomalies. In this context, it is important to observe the limitations placed by the provision of the German Law on Genetic Testing in Humans, such as the prohibition on the prenatal diagnosis of disorders which appear late in life [19, 20].
2. The pregnant woman must be given detailed information by an interdisciplinary panel about the type and severity of the fetal disorder, the prognosis and the therapeutic options.
3. The advisory information given to the pregnant women must be provided by qualified physicians with sufficient knowledge and experience to evaluate the fetal disorder diagnosed in utero including the prognosis and treatment options. This means: if the fetus has a neurological disease, the pregnant woman will be counselled by a neuropediatrician; if the fetus has a disorder of the urogenital tract, a urologist will be consulted, etc. Counseling must be in accordance with current medical knowledge and, in individual cases, can also include intrauterine surgical procedures [21–25].
4. The information and counseling given to the pregnant woman also involves the offer of referral to psychosocial counseling.
5. After the pregnant woman has been given sufficient specialist medical information and has received psychosocial counseling, if the pregnant woman takes the decision to terminate the pregnancy *as the only way out of the existing situation*, it is nevertheless necessary to identify and record the “danger” “according to medical opinion” pursuant to sec. 218a para. 2 StGB. The prerequisite for this is evidence that a significant impairment of the mother’s health which would require treatment can be expected if the pregnancy is not terminated. It is necessary to document the circumstances which make it appear possible and demonstrable that a serious danger to the mother’s health exists (cf. OLG Stuttgart, MedR. 29 [2011] 667–669).
6. After steps have been taken to terminate the pregnancy, the fetus will either be delivered or the pregnancy terminated, with delivery or termination taking place in some cases several days later. In the great majority of cases, the feticide is carried out by means of an injection of potassium chloride; if the duration of pregnancy is less than 20 completed weeks of gestation, induction of abortion in itself can be one option if the fetus is not viable outside the uterus [13,14,26]. In Germany screening using ultrasound for diagnosis is generally carried out at around the 20th week of gestation. This means that certain malformations which can already be diagnosed in the first trimester of pregnancy are detected relatively late, so that if the pregnancy is terminated it involves feticide. If the fetus has a birth weight of more than 500 g, the statutory regulations on maternity leave apply. The pregnant woman must be advised of this.

7. At the mandatory postmortem, it is necessary, given the previous history, to give the cause of death as unnatural which will result in the information being passed to the police and the Department of Public Prosecution. They will order the fetus to be seized and initiate preliminary proceedings to investigate the death; after reviewing the case, the investigation will be closed and the fetus will be released for burial [27]. In Gießen many pregnant women or couples agreed to a postmortem of the fetus which took the form of a fetopathological autopsy.
8. After the autopsy has been completed: the mother or couple are offered the opportunity to have the fetopathological findings explained to them and, if the findings have implications for subsequent pregnancies, are offered repeat genetic counseling.

Because of the chronology of events described above, the Department of Public Prosecution has criticized that the medical records do not allow any investigation of the question whether the conditions as required in sec. 218a para. 2 StGB are present; in particular, the danger to the pregnant woman must be determined and demonstrated. The Department of Public Prosecution has suggested that the “formulaic” statement whereby the danger to the pregnant woman as required in law was present “according to medical opinion” is insufficient. Similarly, standard dictated sentences whereby the pregnant woman is at risk of serious depression or even suicide are viewed skeptically. Citing psychiatric-psychosomatic expert opinions, however, provides a broader diagnostic base for the assessment of the individual case and can be used to support the medical indications for the termination of the pregnancy when termination is explicitly requested by the pregnant woman. Failing such psychiatric evidence, based on the current wording of the law, it could be necessary to refuse the request of the pregnant woman to terminate her pregnancy if physicians are unable to identify a “grave injury” after “considering the pregnant woman’s present and future circumstances” even if the pregnant woman herself anticipates a grave injury and explicitly requests termination of the pregnancy. This could be a major area of conflict [28–33]. Psychiatrists or practitioners of psychosomatic medicine could potentially also be drawn into the conflict.

There is no insinuation that pregnant women are not deeply affected by serious fetal disorders – possibly depending on the type of disorder – and that the decision to opt for a later termination is easy for them. Experience has shown that the opposite is the case. In particular, the termination of an advanced pregnancy, sometimes after the 30th week of gestation, represents a significant burden on the woman when she makes the decision. Often in such cases, because of the late time of diagnosis for a long time the pregnant woman assumed that her pregnancy was unremarkable. The diagnosis forces her to revise her previous hopes and expectations about the birth and her life with her child. Not least because of this, it is necessary to highlight the importance of experienced psychosomatic counseling, particularly for the longer term support of couples after the pregnancy has been terminated and the woman has been discharged from hospital.

The criticisms of the Department of Public Prosecution – predominantly directed against the quality of the documentation in

the medical files – ultimately led to the establishment of a procedure which is transparent in every individual case, with a forensic postmortem procedure followed by a statement on the completeness and plausibility of the documentation. This is made after reviewing the medical files provided which are relevant to the decision [3, 36]. If the pregnancy is terminated for medical reasons it could be expected that, given the particular requirements of sec. 218 para. 2 StGB, participation of the physician is compulsory. But the rules of conduct for the medical profession also apply, and these rules grant physicians a right of refusal to participate in the termination of pregnancies [34]. The Professional Code of Conduct for German physicians (MBO-Ä) includes such a stipulation in sec. 14 para. 1 [35].

Conclusion

Counseling pregnant women or prospective parents when a serious fetal disorder has been diagnosed in utero after the 12th week of gestation p. c. requires a differentiated but complex approach before any decision about late termination of pregnancy is made. It requires advice which must be as accurate as possible about the prognosis and the existing therapeutic options together with the offer of referral to psychosocial counseling. It can also include psychiatric evaluation or psychosomatic counseling of the pregnant woman. Although the law does not explicitly require it, nevertheless carefully documenting the proceedings and the arguments on which the “medical opinion” is based and which are used to support the indications for terminating the pregnancy is strongly recommended for all pregnancy terminations carried out for medical indications.

Conflict of Interest

The authors declare that they have no conflict of interest.

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