THE OBSTETRIC INDICATIONSLIST

FINAL REPORT

of the working-party adjustment"Kloosterman"-list(WAK)

(February 1987)

PART 2: FOR THE DAILY PRACTICE

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PART 2 OF THE FINAL REPORT OF THE WAK

FOR THE DAILY PRACTICE

The report of the WAK has explained how the WAK arrived at the Obstetric Indicationslist. The WAK considers the methods and systems used of such importance that in this part 2"For the Daily Practice" the determining factors for the establishment of the obstetric policy, the decision-making diagram based upon this and the procedure-outline for the determination of the obstetric policy once again will be included, together with the Obstetric Indicationslist and explanation.

The WAK hopes that in this way the thinkingprocess as developed by the WAK, which is the basis for the new Obstetric Indicationslist,will be transmitted to the obstetric health care workers.

The WAK emphasises that the Obstetric Indicationslist will only function optimally if primary health care(phc) and secondary health care(shc) workers collaborate well.The working-party would like to point out that a well-founded and carefully composed Indicationslist could be a positive contribution to the establishment and improvement of obstetric cooperation.

1.GUIDELINES AND OBJECTIVE OF THE OBSTETRIC INDICATIONSLIST.

Considering that pregnancy, delivery and puerperium in principal are normal physiological processes; and also that homebirth is justified if delivery is expected to proceed normally; the WAK has formulated the following guidlines for the Obstetric Indicationslist:

a. The pregnant woman can in principal be supervised by the phc worker, unless an indication exists or develops which requires supervision by the shc worker: person(who).

b. The pregnant woman can in principal give birth at home (or as an outpatient in an outpatientclinic as a transferred homebirth), unless an indication exists or develops which requires a hospital-birth: place(where)

Note:
Primary health care (phc) workers = GP and midwife, to be considered equal as far as obstetric care is concerned;
Secondary health care(shc) workers = obstetrician(refer III D)

The purpose of the indicationslist is twofold:
a. On the one hand the list offers a well-founded and carefully composed guideline for midwife,GP and obstetrician to establish a justified obstetric policy to the benefit of both mother and child.
b. On the other hand the list could be used by a medical advisor of a public or private health insurance company in his assessment of the obstetric management requested; or when testing obstetric health care workers on the basis of annual statistics.

The list, and especially the methodology used to arrive at the advice for obstetric management, is a directive for justifiable obstetric care. The nature of the list is not mandatory. If, in an individual case deviation from the advice given is necessary, the determining factors for the establishment of the obstetric management will be the crux to motivate (and test) a possibly different decision. The list indicates what could happen(possible, desirable), not what should happen.

2. DETERMINING FACTORS FOR THE CAREFUL ESTABLISHMENT OF THE OBSTETRIC POLICY in the case of certain indications.

-1. Nature of the risk for mother and/or child with this indication.
- 1.1 What complication(s) for mother and/or child can arise with this indication?
- 1.2 How serious are the complication(s) and what are the consequences?
- 1.3 What is the likelihood that the complication(s) will indeed arise?

-2. Prevention of complication(s) with this indication
- 2.1 Can the phc worker prevent complication(s) with this indication?
  - a: if yes: What are the specific measures necessary?-->A(*) or B(*)
  - b: if no: 2.2
- 2.2 Can the shc worker prevent complication(s) with this indication?
  - a: if yes:What are the specific measures necessary ?--> C(*)
  - b: if no: --> 3.1

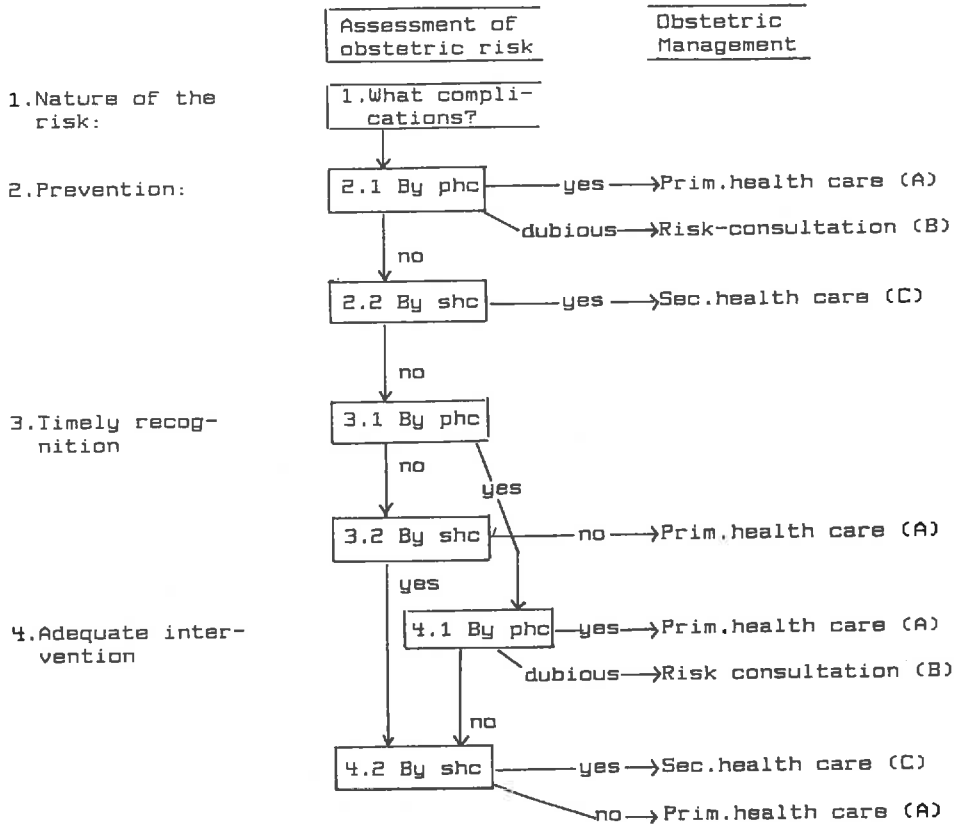
-3. Timely recognition of (threatening) complication(s) with this indication.
- 3.1 Can the phc worker recognise (threatening) complication(s) in time?
  - a:if yes:What are the specific measures necessary?-->4.1
  - b:if no:-->3.2
- 3.2 Can the shc worker recognise (threatening) complication(s) in time?
  - a: if yes:What are the specific measures necessary?-->4.2
  - b: if no:-->A(*)

-4. Adequate intervention when complication(s)(threaten to) arise with this indication.
- 4.1 Can the phc worker adequately take care of (threatening) complication(s) as they arise?
  - a:if yes:This means that intervention by the phc worker is such that the outcome will be affected positively.-->A(*) or B(*)
  - b:if no:-->4.2
- 4.2 Can the shc worker adequately take care of (threatening) complication(s) as they arise?
  - a:if yes:This means that intervention by the shc worker is such that the outcome will be affected positively.-->C(*)
  - b:if no:There is no significant reason for secondary obstetric health care-->A.(*)

Refer also to the Decision-making diagram.
* A=primary obstetric health care
  B=risk-consultation
  C=secondary obstetric health care

(A,B and C indicate obstetric policy/management)

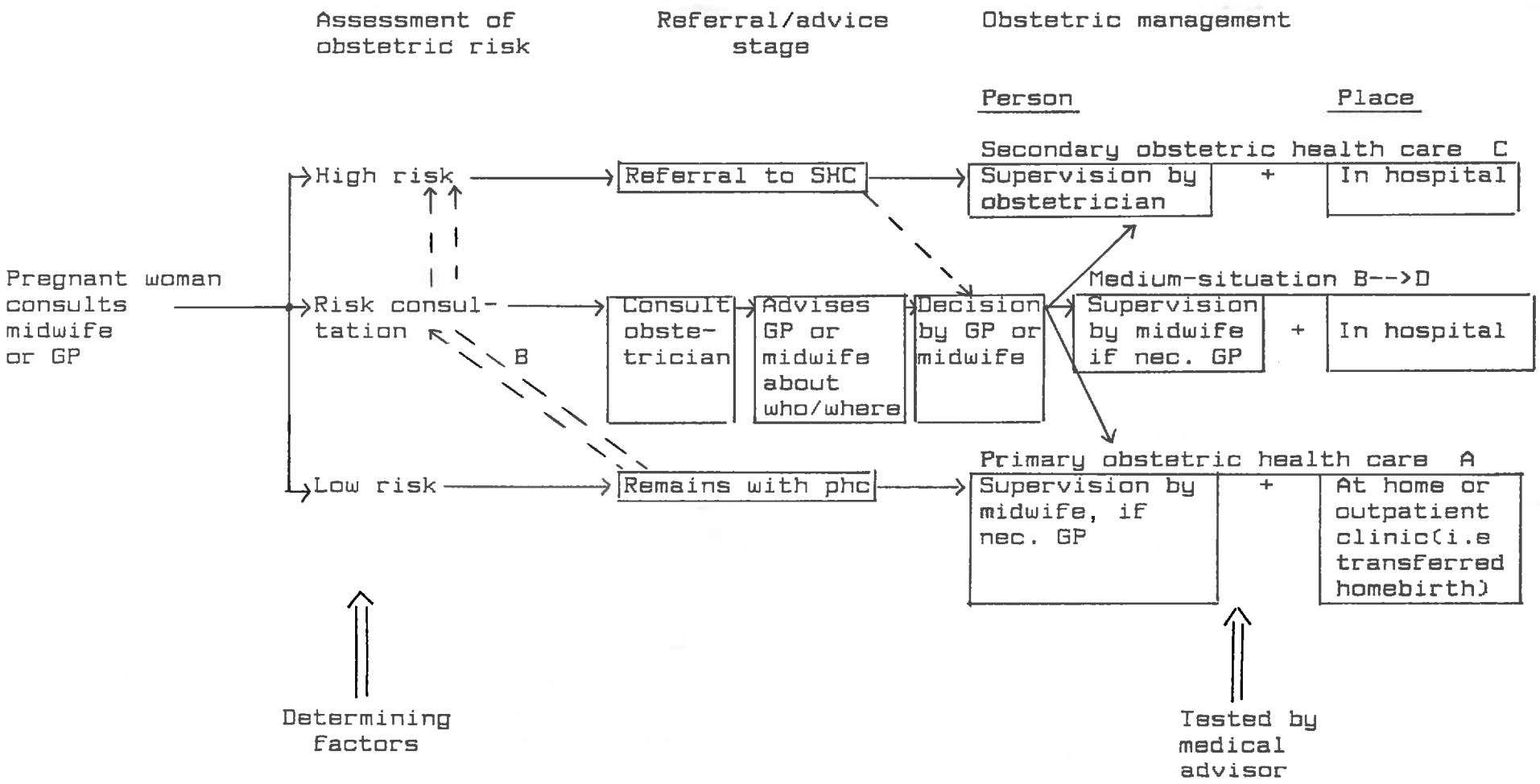
2. DECISION-MAKING DIAGRAM



In this diagram decisions about obstetric management in the case of certain conditions, are made using the determining factors.

[Note:In the original document p. 5 is a scaled-down copy of p.3+4.nf

3. PROCEDURE-OUTLINE FOR EXECUTING THE OBSTETRIC POLICY



4.A. OBSTETRIC INDICATIONSLIST

1. Indications established during the pregnant woman's first visit, by carefully questioning, assessing and examining (socalled primary indications).

   1.1 Indications based upon conditions that could affect pregnancy and/or delivery negatively; or that could be affected negatively by the pregnancy/delivery.

   1.2 Indications resulting from the obstetric interview.

2. Indications arising during pregnancy

3. Indications arising during delivery

OBSTETRIC POLICY:(REFER III, B)

With every indication the obstetric risk can be translated into obstetric management, using the determining factors for the establishment of obstetric management:

A:Primary obstetric care:the woman remains in the care of the phc worker(person) and gives birth at home (or in an outpatient clinic as a transferred homebirth)(place).

B:Riskconsultation:advice given by the shc worker is necessary for the determination of the obstetric management. Using this advice, the phc worker, in consultation with the advisor, determines the obstetric management; the phc worker is responsible for the management chosen.

C:Secondary obstetric care:the woman is referred to the shc worker(person) and gives birth at the hospital(place)

B-->D:Mediumsituation:sometimes the risk for mother and/or child is such that it is desirable that delivery takes place at the hospital, although pregnancy and delivery can be supervised by the phc worker(mediumsituation (B-->D).

Prerequisite is that the phc worker can recognise (threatening) complications in time and that the shc worker is readily available if necessary. The mediumsituation will only arise following a riskconsultation procedure. (B-->D).

INDICATIONS	OBSTETRIC POLICY A B C D	NOTES
1.1. Conditions that could affect pregnancy and/or delivery negatively; or that could be affected by them.		(existing or in interview)
A. Neurological conditions		
1. Epilepsy,no attacks, no medication	A	
2. Epilepsy with medication	B	refer p. 12
3. Subarachnoid bleed	B	
4. Multiple sclerosis	B	
5. Slipped disc	A	refer 2.6
B. Medical conditions		
1. Significantly reduced pulmonary capacity	B	
2. Tuberculosis, active stage	C	
3. Asthma		indication exercise refer III,C5; explanation p.12
4. Cardiac disorders with haemo-dynamic consequences	B	
5. Thrombo-embolic process in interview	B	
6. Coagulation-disorders	C	
7. Decreased renal capacity	B	
8. Renal dialysis	C	
9. Kidney transplant	C	re: medication
10.Essentiel hypertension		refer 2.18:toxaemia
11.Insulin Dependant Diabetes Mellitus	C	refer 2.17:gesta-tional diabetes
12.M.Addison	C	
13.M.Cushing	C	
14.Hypothyroid disease	B	
15.Hyperthyroid disease	C	
16.Anaemia, Hb < 6,0 mmol/l	B	refer 2.2:anaemia
17.Ulcerative colitis	C	
18.M.Crohn	C	
C. Obstetric conditions		
1. Prolapse surgery	B	possibly B-->D, refer p.13
2. Partial cervical amputation, conisation	C	following normal delivery: A
3. Myoma-enucleation, subserous	A	
4. Myoma-enucleation, submucous or intramural	C	
5. Repair of fistula	C	
6. Abnormal cervical smear	A	or C if invasive carcinoma;ref. p.14
7. Daughter of DES-mother	A	refer p. 14
8. IUD in situ	A	refer p. 15

INDICATIONS	OBSTETRIC POLICY A	B	C	D	NOTES
9. Treatment for infertility	A				refer p. 15
10.Narrow pelvis	A				refer p. 15; also 2.33:disproportion
11.Fractured pelvis		B			refer p. 15
12.Condition following Rickets		B			refer p. 15
D. Miscellaneous					
1. Medication					refer p. 16
2. Hard-drugs usage(incl. Methadone)			C		refer p. 18
3. Psychiatric disorders		B			refer p. 18 (preferrably:A)
4. Child for adoption	A				refer p. 18
1.2. Based on obstetric interview					
1. Uncertainty about pregnancy dates					refer 2.24, p. 36
2. Rh negative with antibodies			C		
3. Toxaemia	A				refer 2.18:toxaemia
4. Repeated abortion	A				refer p. 19
5. Premature labour 17-28 weeks		B			refer p. 19
6. Premature labour 29-37 weeks					refer p. 20
- once 34 wks or less		B			
- once 35th,36th or 37th wk	A				
- twice		B			
7. Incompetent cervix and/or Shirodkar suture; following a normal pregnancy	A		C		refer p. 21 refer p. 21
8. Placental abruption			C		refer p. 21
9. Forceps or vacuum extraction	A				refer p. 21
10.Previous Caesarian section			C		refer p. 22
11.Last time underdeveloped child			C		refer p. 23
12.Last time child in poor condition		B			refer p. 23
13.Last time stillborn child: intrauterine foetal death:					
- cause unknown		B			refer p. 24
- cause known					refer p. 24
14.Last time child passed away: in first week or year:					
- cause unknown		B			refer p. 24
- cause known					refer p. 24
15.Previous child with congenital or hereditary abnormalities					refer p. 25
16.Postpartum haemorrhage caused by - episiotomy	A				refer p. 26
- ruptured cervix		B-->D			refer p. 26
- retained products		B-->D			refer p. 27
- coagulation disorder		B			refer p. 27
- atonic bleed		B-->D			refer p. 27

17.Manual removal of placenta		B-->D			refer p. 27
18.Third degree tear	A				refer p. 28
19.Spontaneous symphysiolysis	A				refer p. 28
20.Psychosis postpartum	A				refer p. 29
21.Maternal age:					
nullipara > 35 yrs		B-->D			refer p. 29
multipara 40 yrs and over		B-->D			refer p. 29
22.Maternal age < 15 yrs	A				
23.Grande multipara	A				refer p. 30
2. Developed during pregnancy					
1. Intercurrent disorders	A				refer p. 30
2. Anaemia, Hb < 6,0 mmol/l		B			refer p. 31
3. Pyelitis	A				refer p. 31
4. TORCH					
a. TOxoplasmosis			C		refer p. 32
b. Rubella	A				refer p. 32
c. Cytomegalia	A				refer p. 32
d. Herpes simplex		B			refer p. 32
5. Hep.B-antigen positive during pregnancy	A				refer p. 33
6. Slipped disc developed during pregnancy		B			refer 2.1:intercurrent disorders
7. Laparotomy during pregnancy	A				refer 2.1:intercurrent disorders
8. Abnormal cervical smear	A				refer 1.1.C.6
9. Drugs during pregnancy					refer 1.1.D.1
10.Hard drugs usage (incl. Methadone)			C		refer 1.1.D.2
11.Psychiatric disorders		B			refer 1.1.D.3
12.Serious hyperemis gravidarum	A				refer 2.1:intercurrent disorders
13.Suspected extra-uterine pregnancy		B			refer 2.1:intercurrent disorders
14.Antenatal procedures(amniocentesis, chorion villi sampling)	A				refer 2.1:intercurrent disorders
15.Suspected foetal abnormalities		B			refer p. 34
16.Amniotic fluid loss		B			refer 2.1:intercurrent disorders
17.Gestational diabetes			C		refer p. 34
18.Toxaemia		B			refer p. 35
19.Proteinuria, non-infected			C		refer p. 35
20.Active rhesus sensitivity			C		
21.Blood loss before 20th week					refer p. 36
22.Blood loss after 20th week			C		refer p. 37
23.Placental abruption			C		
24.Duration of pregnancy uncertain					refer p. 37
25.Fundal height:small for dates					refer p. 39
26.Fundal height:large for dates		B			refer p. 40
27.Postmature + 40 wks			C		refer p. 40
28.Threatened premature labour 17-28 weeks			C		refer 1.2.5
29.Threatened premature labour 29-37 weeks			C		refer 1.2.6
30.Incompetent cervix			C		refer 1.2.7 p. 21

31.Multiple pregnancy		C	
32.Abnormal presentations, incl. breech		B	refer p. 41
33.Disproportion in 3rd trimester		B	refer p. 42 1.1.C.10 p.15
34.Head not engaged when labour starts		B	refer p. 42
35.Impossible to bring head in contact with pelvis		B	
36.No antenatal care		B	if nec. B-->D
37.Child for adoption	A		refer 1.1.D.4 p.18
38.Intrauterine death		B	refer p.42

3. Developed during labour

1. Abnormal presentation		C	refer p. 43
2. Signs of foetal distress		C	refer p. 43
3. Failure to establish labour after S.R.M.		C	refer p. 44
4. Failure to progress in labour		C	refer p. 44
5. Failure to progress in second stage		C	refer p. 45
6. Excessive blood loss during labour		C	refer p. 45
7. Placental abruption		C	refer p. 46
8. Prolapsed cord		C	refer p. 46
9. Massive bleed in 3rd or 4th stage		C	
10.Retention of (a part of) the placenta (1 hr postpartum)		C	
11.Total rupture of perineum		C	
12.Episiotomy plus tear		C	

4.B.EXPLANATION OF THE OBSTETRIC INDICATIONSLIST

The numbers between brackets under "obstetric policy" refer to the question of the determining factors for the estabishment of the policy.

1.1.A.2.EPILEPSY WITH MEDICATION

General

A woman suffering from epilepsy and using medication for that condition, should know that she has to consult her GP if she considers (another) pregnancy.Her GP will then consult with the neurologist involved and the obstetrician about the medication used (risk of congenital abnormalities),the obstetric policy and early diagnostic procedures if necessary.This consultation is similarly important when a woman suffering from epilepsy and using medication for it, proves to be pregnant.

Conclusion:risk-consultation(B)

1.1.B.3.ASTHMA BRONCIALE

Asthma bronciale can be used as an example to illustrate how to determine the obstetric management of those indications not given explicitly in the list; or when fine-tuning is necessary because of additional factors(refer III,C 5)

Description

It is useful to identify three groups of patients:

1. asthma bronciale, no specialist-intervention, no medication;
2. asthma bronchiale, with specialist intervention; medication prevents attacks;
3. asthma bronciale, with specialist-intervention;with attacks, despite medication.

General

Asthma bronciale is a heterogenous illness. Etiology,treatment and prognosis are different for each patient.

Asthma bronciale can be influenced by pregnancy because of the altered hormone-balance and altered lung-function.The pregnancy can be influenced by asthma bronciale, especially if medication is used(refer drugs and pregnancy 1.1.D.1) .An asthma bronciale attack during pregnancy is extremely rare.

Obstetric policy

Group 1:

This is a mild form of asthma bronchiale. Maintenance medication is not necessary. The phc worker can manage the patient. The GP can intervene if problems with the asthma arise.

Conclusion: primary obstetric care(A)

Group 2:

This group receives specialist intervention and needs medication to remain attack-free. In this case it is desirable to obtain advice from the specialist involved as well as from the obstetrician, before decisions about obstetric management are made by the phc worker.

Conclusion: risk consultation(B)

Group 3:

This group is not free from asthma attacks, despite specialist intervention and medication. In this case a hospital birth should be considered, so that obstetrician and if necessary lungspecialist are on hand, if needed. The phc worker can supervise the woman, using the risk consultation procedure.

Conclusion: medium situation(B-->D)

1.1.C.1. PROLAPSE SURGERY IN INTERVIEW

General

Following prolapse surgery there is an indication for primary episiotomy with subsequent deliveries. After delivery the area needs to be carefully inspected and stitched.Circumstances for inspection and suturing need to be optimal.Consultation with the obstetrician is necessary (re: degree of prolapse and nature of surgery).

Obstetric policy

Obstetric management is chosen in consultation with the obstetrician. One could consider a hospital birth supervised by the phc worker: medium situation.

Conclusion: risk consultation(B), possibly medium situation (B-->D)

1.1.C.6 ABNORMAL CERVICAL SMEAR

Obstetric policy

In the case of an abnormal cervical smear, further gynaecological inspection is indicated.During pregnancy this is to be considered an intercurrent disorder(refer 2.1); the woman can be supervised by the phc worker.(With carcinoma in situ or less, further treatment can be delayed until after delivery).

Conclusion: primary obstetric care(A)
intercurrent disorder (refer 2.1)

Invasive carcinoma is a contraindication for vaginal delivery.

Conclusion: secondary obstetric care (C)

1.1.C.7 DAUGHTER OF DES-MOTHER

Description

This concerns women whose mothers are known (or suspected) of having been given Diethylstilbestrol (DES) during pregnancy.

General

These women have an increased risk of anatomical deviations of vagina (septum, ridge), cervix(narrow endocervical ostium, thickening, changes in structure), uterus(small cavum, cavum in T-form) and tubae.There is a slightly increased chance of adenocarcinoma of vagina and cervix.It is relevant to question if and how these disorders can influence pregnancy and delivery.These women have an increased risk of miscarriage, extra-uterine pregnancy and premature labour.

Obstetric policy

The nature of the complications is known(1).Prevention is not possible(2). The phc worker can recognise complications in time(3) and if necessary refer to the shc worker. It is important that the phc worker is aware that the complications mentioned earlier can arise.

Conclusion: primary obstetric care (A)

Note;
The likelihood(risk) that complications will arise is higher than normal;however following the determining factors for the establishment of the obstetric policy,the decision will be "primary obstetric care".

1.1.C.8 IUD IN SITU

General

An IUD in situ can cause some blood loss in the early stages of pregnancy; there is an increased risk of miscarriage and extra-uterine pregnancy. There is no need for secondary obstetric care if these complications do not arise.

Conclusion: primary obstetric care (A)

1.1.C.9 TREATMENT FOR INFERTILITY

General

Treatment for infertility has been successful when it results in a lasting pregnancy.This is essentialy a normal pregnancy and decisions about obstetric management can be made using the normal procedures.

It is understandable that a certain relationship has been established between patient and gynaecologist and/or gynaecology department based upon which the woman could wish to be supervised by the gynaecologist. According to the guidelines for the determination of the obstetric policy, there are however no medical reasons for secondary obstetric care. The wish for secondary obstetric care during pregnancy and delivery will therefore only be acknowledged if the woman is prepared to accept the financial consequences.

Conclusion: primary obstetric care (A)

1.1.C.10 NARROW PELVIS

General

Vaginal examination has only limited value in establishing narrow pelvis early in pregnancy.Narrow pelvis (including relative narrow pelvis) presents as disproportion in the third trimester (refer 2.33). Advice from the obstetrician can be desirable following fractured pelvis and rickets.

Obstetric policy

Consider obstetric consultation following fractured pelvis and rickets.

Conclusion: risk consultation (B)

Suspected narrow pelvis (other causes) presents as disproportion in third trimester (refer 2.33). Vaginal examination in first trimester is unreliable.

Conclusion: primary obstetric care (A)

1.1.D.1 MEDICATION

General

1. When discussing the subject of medication and pregnancy it is important to question if and how the use of medication in itself forms a risk for the progress and outcome of pregnancy and delivery, both for mother and child.

With regard to the obstetric indicationslist, only those drugs used with or indicated with low risk conditions/situations are of importance. In conditions with dubious or increased risk specialist consultation is indicated. One may assume that in the resulting determination of obstetric policy, pharmaco-therapeutic aspects will be considered. The indicationslist therefore does not have to be more explicit about the risk of drugs used in conditions with dubious or increased risk, such as: epilepsy with medication (dubious), hypothyroid disease (dubious), hyperthyroid disease (high) and tuberculosis, active stage (high). As a result only those drugs prescribed for symptomatic indications (i.e. pain, insomnia) and self-medication drugs are important in this discussion. The explanation will discuss the latter.

It is a known fact that many pregnant women use drugs at some stage during pregnancy.

2. Using the determining factors for the establishment of the obstetric policy will enable us to answer the question under (1) above.

3. To start with, one can try to determine the possible complications of the use of a diversity of drugs during pregnancy and delivery; and furthermore how likely it is that these complications will indeed arise. Apart from the fact that it is probably not possible to do this because of a lack of data, this report does not intend to substitute textbooks. The list would become too extensive to be useful.

4. Another approach to the problem could be to list drugs in groups and then determine a risk category for each group.

The following classification system could be used:
a. drugs, presummably used by many pregnant women with no known harmfull effects on mother and child reported;

b. drugs, presumably used by only a small number of pregnant women with presently no known harmfull effects on mother and child reported; based on the pharmacological effect it is not expected that harmfull effects will be reported either.
c. drugs suspected to cause disturbance on the basis of their pharmacological action, which form a risk for mother and/or child (during pregnancy and during or after delivery).
d. drugs known to have a teratological effect.

Subsequently one may assume that there is no risk of complications with the use of drugs from group (a) or (b), while that risk does exist with the use of drugs from group (c) and (d). Again it is necessary to determine what complications are likely to arise for every drug or pharmaco-therapeutic group, following the guidelines for the determination of the obstetric policy. For instance, possible complications in newborn are coagulation disorders caused by acetylsalicylic acid, hypotonia and hypothermia caused by benzodiazepines. So even when divided into groups, every drug or pharmacological group still needs further investigation. As mentioned before, that discussion would be too extensive for the purpose of this report.

Whether or not complications arise as a result of the use of drugs during pregnancy depends on more than just the sort of drug taken. Acetylsalicylic acid for instance can cause disorders mentioned before, depending on duration, dose and stage of pregnancy. All these factors have to be considered.

5. Obstetric policy

With the help of the criteria for the determination of the obstetric policy one can decide what the most desirable obstetric management is for every drug. Considering factors like nature of the drug, dose, duration of use and stage of pregnancy one must decide what the possible complications are and how likely it is that they will indeed arise (1). It needs to be determined whether these complications can be prevented (2), can be recognised in time (3) and if adequate intervention is possible (4); these questions need answering from the perspective of both phc and shc worker. Classifying a drug in one of the four groups above (refer 4.) could prove helpful. Questions regarding drug-induced complications, intoxications and contact with potentially harmful substances can be directed towards the National Poison Information Centre , Bilthoven, ph. 030-742200 or 030-742875.

1.1.D.2 HARD DRUG USAGE DURING PREGNANCY (INCL. METHADONE)

General

Hard drug usage by the mother can delay growth of the child during pregnancy.After delivery the child can suffer from depression of respiration and withdrawal symptoms. The mother also needs extra care and attention.

Obstetric policy

Complications caused by hard drugs usage by the mother (1) can not be prevented (2), but the shc worker can recognise them in time(3) and adequate intervention is available.

Conclusion: secondary obstetric care (C)

1.1.D.3 PSYCHIATRIC DISORDERS

Description

It is hard to give an exact description of psychiatric disorders. One can think of serious depression, phobia, compulsion neurosis and psychosis. Psycho-social problems do not belong in this group.

Obstetric policy

If the pregnant woman is under psychiatric care, it seems right to consult the psychiatrist in order to determine the obstetric management. If the pregnant woman is not receiving psychiatric care, it can still be desirable to obtain psychiatric advice. Often homebirth is preferrable (known, serene setting).

Conclusion: risk consultation (B)
(preference: primary obstetric care (A))

1.1.D.4 CHILD FOR ADOPTION

General

Pregnancy and delivery are to be considered normal, despite the fact that the mother has decided not to keep the baby. It is important that the child can be quickly handed over to child protection (services), (in any case be separated from the mother).

In principal this can be a home birth. However delivery in hospital supervised by the phc worker should be possible in some cases (if necessary for giving up the child) (medium-situation).

Conclusion: primary obstetric care (A)

1.2.4 (REPEATED) ABORTION IN INTERVIEW

Description

Abortion: expulsion of the product of conception in the first 16 weeks of amenorrhoea (including day 112).

General

Abortion can have numerous causes and occurs in approximately 10% of pregnancies. Repeated abortion (at least three successive times) is not a disorder. The prognosis (regarding a new pregnancy) is good.

Obstetric policy

Prevention of (repeated) abortion is not possible(2), the phc worker can recognise the condition in time(3) and intervention to prevent it from happening does not exist(4).

Conclusion: primary obstetric care (A)

1.2.5 PREMATURE LABOUR 17-28 WEEKS
(i.e. day 113-196 inclusive)

General

Premature labour in week 17-28 occurs in approximately 1,5% of all deliveries. There clearly is an increased risk of repetition following a previous premature labour either in week 17-28 , or in week 29-37.

Obstetric policy

There is an increased risk of premature labour(1), prevention is not possible(2). The phc worker can recognise the condition in time(3)

and the shc worker can intervene adequately, depending on the cause(4).

Conclusion: risk-consultation (B).

1.2.6 PREMATURE LABOUR 29-37 WEEKS
(i.e. day 197-259 inclusive)

General

Premature labour in this stage is not rare (depending on the definition) in up to 10% of all deliveries. About 80% of premature labour occurs in week 35 and 36, 20% in week 34 or earlier. There are many causes but most of the time the cause remains unknown. The prognosis of the mother depends on the underlying pathology if any (placental abruption, placenta praevia, toxaemia, multiple pregnancy etc.). The prognosis of the child depends on the pathology mentioned, as well as on congenital disorders if any, duration of pregnancy, birth-weight and available care after delivery.

A previous premature labour of which the cause is not known (in interview) increases the chance of another premature birth; this is even more so if two previous pregnancies resulted in premature labour. The risk of premature labour increases, the earlier it happened previously. In general premature labour cannot be prevented, but it is important to recognise it in time so that adequate intevention can be offered.

Obstetric policy

With one premature labour in history, the chance of repetition is increased(1). Premature labour cannot be prevented (2), but the phc worker can recognise it in time(3), especially if she/he pays extra attention to it and the woman is instructed so that she will recognise early symptoms herself. Immediate referral to the shc worker is indicated if premature labour threatens again. Depending on additional factors i.e. stage of prematurity with previous pregnancy, contractility of the uterus and other obstetric indicators, consultation of the obstetrician can be considered. Consultation should take place if premature labour previously occurred in week 34 or earlier.

Conclusion:

with premature labour (in interview) in week 34 or earlier:
risk consultation (B)

with premature labour (in interview) in week 35, 36 or 37:
primary obstetric care (A)

Two premature labours in history increases the risk of another premature labour such that consultation is advisable.

Conclusion: risk consultation (B) A woman receiving secondary obstetric care (following a consultation process), arriving at 36 weeks of pregnancy, can be referred back to the phc worker.

1.2.7 INCOMPETENT CERVIX AND/OR SHIRODKAR SUTURE (ALSO: IN INTERVIEW)

Obstetric policy

In the case of incompetent cervix and Shirodkar suture there is an increased risk of premature labour(1). The condition of the cervix should be monitored carefully so that complications will be recognised in time(3). Only the shc worker has adequate intervention methods at her/his disposal(4).

Conclusion: secondary obstetric care (C)

Incompetent cervix in a previous pregnancy, increases the risk of repetition; the same measures are necessary.

Conclusion: secondary obstetric care (C)

Following an intervening normal pregnancy and delivery, there is no longer an increased risk of incompetent cervix.

Conclusion: primary obstetric care (A)

1.2.8 PLACENTAL ABRUPTION

General

Placental abruption is a serious condition for mother and child. It can happen with toxaemia and present totally unexpectedly. The chance of repetition is increased, depending on parity, especially after the second child.

Obstetric policy

Placental abruption in interview presents an increased risk of repetition (1). This cannot be prevented(2) but timely recognition(3) and rapid intervention(4) are essential for mother and child. Only the shc worker can take care of this (hospital admittion before due date if necessary).

Conclusion: secondary obstetric care (C)

1.2.9 LAST TIME FORCEPS- (FE) OR VACUUM-EXTRACTION (VE)

General

The indications for FE or VE are: foetal distress and failure to progress in second stage or timespan (refer medical indications during labour:3).

- Foetal distress
  foetal distress with meconium in amniotic fluid and decreasing and/or irregular heart rate.
  Possible causes: a prolonged expulsion phase, dysmaturity, toxaemia, complications with the cord etc.
- Failure to progress in second stage
  this happens if with full dilatation, ruptured membranes, forcefull contractions and cooperation of the woman, there is no progress after one hour
  Possible causes: parity of the woman, the birthcanal, size of the child, general condition of the mother etc. (refer also: 3.5).

The cause of a previous FE or VE needs to be established. Generally these causes will be recognised in time with a new pregnancy. Chance of repetition following previous FE or VE appears to be low (6%).

Maternal indications for FE or VE (for instance cardiac conditions, neurological disorders, ansurysms) list under 1.1.: Conditions that could affect pregnancy and/or delivery negatively.

Obstetric policy

Risk of repetition is low following a previous FE or VE (1). The phc worker usually can recognise in time if FE or VE will again be indicated(3), the shc worker will then be able to intervene adequately.

Conclusion: primary obstetric care (A)

1.2.10 CAESARIAN SECTION (IN INTERVIEW)

General

A Caesarian section leaves a scar in the uterine wall.This weakens the uterus and with every successive delivery there is an increased risk of rupture of the uterus or problems with expulsion.

Obstetric policy

There is an increased risk of complications following Caesarian section(1).The phc worker cannot, the shc worker can possibly prevent them (observation during labour)(2) and also recognise them(3); the shc worker can adequately intervene if necessary(4).

Conclusion: secondary obstetric care (C)

1.2.11 LAST TIME UNDERDEVELOPED CHILD.

Description

A child is considered underdeveloped when its birth-weight is lower then could be expected based on duration of pregnancy. (In The Netherlands the "growth-curve of Amsterdam" is used for this purpose; this growth-curve is based on data collected from white Dutch women; the report warns the reader that these data are not necessarily correct when applied to ethnic minority groups (in The Netherlands).

General

Underdevelopement is usually caused by pathology. The perinatal morbidity in these children is raised. A variaty of pathology causes underdevelopement; an incompetent placenta is most frequently the cause. Risk of repetition is clearly increased. (refer also 2.25)

Obstetric policy

Underdevelopement of a previous child means an increased risk of repetition in a subsequent pregnancy(1). Usually this can not be prevented (depending on the cause) (2). Underdevelopement is difficult to recognise in time, the shc worker is better equiped to do so (3) and can intervene adequately ; therefore referral to secondary obstetric care is indicated.

Conclusion: secondary obstetric care (C)

1.2.12 LAST TIME CHILD IN POOR CONDITION

Description

In this category belong asphyxia post partum, resuscitation of the child and the child with symptoms resulting from trauma at birth.

General

The approach in this case is the same as with 1.2.13 and 1.2.14 with this difference, that here the child has not passed away.

Obstetric policy

Consultation with the shc worker is desirable, particularly if the cause is unknown (mainly to try to establish the cause of the poor condition of the previous child).

Conclusion: risk consultation (B)

If the cause is known then the determining factors should be the guideline to establish obstetric management (i.e. how likely is repetition, can this be prevented, is recognition possible, is adequate intervention available) (refer also 1.2.13)

1.2.13 LAST TIME STILLBORN CHILD

General

Foetal death in utero has numerous maternal and/or foetal causes:
- maternal:eg incompetent placenta (as a result of hypertension, toxaemia, diabetes), shock, serious illnesses;
- foetal:eg congenital disorders, cord complications;
- both:eg rhesus sensitisation, infections (rubella, syphlis, cytomegalia, toxoplasmosis).

It is very important to establish the cause so that decisions can be made about the obstetric management of subsequent pregnancies.

Obstetric policy

Consultation with the shc worker is desirable if the cause is not known (mainly to try to establish the cause in the previous pregnancy).

Conclusion: risk consultation (B)

If the cause is known, then the determining factors should be used to appraise the obstetric risk and to decide on the obstetric policy;
for instance:

- essentiel hypertension: chance of repetition is increased and secondary obstetric care has realistic intervention methods: secondary obstetric care (C);
- serious illness of the mother: risk consultation (B) or secondary obstetric care (C)
- congenital disorders: genetic advice is usually needed when another pregnancy is considered. If pregnant, it could be considered to ask advice: risk consultation (B)
- cord complications: chance of repetition not increased: primary obstetric care (A)
- infections: chance of repetition usually not increased: primary obstetric care (A)

1.2.14 LAST TIME CHILD PASSED AWAY: IN FIRST WEEK OR YEAR.

General

Causes are numerous for the passing away of a child in the first week or year of life. It is very important to establish the cause so that decisions can be made regarding obstetric management in a subsequent pregnancy.

Obstetric policy

Consultation with the shc worker is desirable, particularly if the cause is unknown (mainly to try to establish the cause).
Conclusion: risk consultation (B)

If the cause is known, then the determining factors should be used as the guidelines to decide upon the obstetric policy (i.e. how likely is repetition, is prevention possible, can it be recognised in time and is adequate intervention available) (refer also 1.2.13)

1.2.15 PREVIOUS CHILD WITH CONGENTAL OR HEREDITARY ABNORMALITIES

General

There are many different congential and hereditary abnormalities. Discussion of all these conditions is not appropriate within the concept of this report. Careful investigation of nature of abnormality, severity, possible cause and chance of repetition with a new pregnancy is desirable if a previous child was born with congenital or hereditary abnormalities. This investigation should preferrably be undertaken before a new pregnancy is considered. Genetic advice is sometimes necessary. Decisions can be made about the need for prenatal diagnosis of the child.

Obstetric policy

Decisions about the obstetric policy will be made, considering data available from investigations following the birth of a previous child with congenital or hereditary abnormalities, using the determining factors as a guideline. Sometimes risk consultation is necessary: if certain data are unclear or absent, or if it is not clear what the possible consequences could be.

1.2.16 POSTPARTUM HAEMORRHAGE (IN INTERVIEW)

Description

Postpartum haemorrhage is pathologic if the total blood loss during delivery (including 4th stage) exceeds 1 litre.

General

Postpartum haemorrhage **should** be considered a symptom. It is very important to distinguish the different causes.

Causes

a. episiotomy
b. ruptured cervix
c. retained products
d. coagulation disorders
e. atonic bleed

Ad d:
Coagulation disorders can be caused by already existing conditions (Haemophilia A and B, conditions with thrombocytopenia etc.). They can also be caused by a complication during pregnancy and delivery: diffuse intravasal coagulation (for instance as a result of toxaemia, embolus of amniotic fluid, placental abruption).

Ad e:
An atonic bleed is a postpartum haemorrhage for which no cause can be found. Factors that promote an atonic bleed are (amongst others): distended bladder, prolonged delivery, extreme distension of the uterus (multiples, hydramnios, big child), drugs that relax the uterus, abnormalities of the uterus (myoma, uterus duplex).

Obstetric policy

Decisions about the obstetric policy should be made using the determining factors for the establishment of obstetric management.It is desirable to determine the obstetric policy for every cause of postpartum haemorrhage separately.

a. Postpartum haemorrhage caused by episiotomy
No increased risk for repetition with subsequent deliveries(1)
Conclusion: primary obstetric care (A)

b. Postpartum haemorrhage caused by ruptured cervix
There is little data available about this cause. Assuming that the chance of repetition could possibly be slightly increased, hospitalbirth is desirable so that complications can be cared for adequately and quickly(4). Repetition can however not be prevented(2). Therefore pregnancy and delivery can be supervised by the phc worker.
Conclusion: medium situation (B-->D)
(refer footnote)

c. Postpartum haemorrhage caused by retained products
Risk of repetition is slightly increased(1). Prevention is not possible(2). Hospital birth is necessary for quick and adequate intervention(4). Supervision of delivery can be done by the phc worker.

Conclusion: medium situation (B-->D)

(refer footnote)

d. Postpartum haemorrhage caused by coagulation-disorders.
It is essential to establish the underlying cause if possible. This will then determine obstetric management.

Conclusion: risk consultation (B)

e. Postpartum haemorrhage caused by atonic bleed
Here too establishment of the underlying cause is important for the determination of the obstetric management. The cause of the atonic bleed can determine the policy (for instance placental abruption).
Chance of repetition seems increased. Hospital birth is indicated so as to intervene adequately and quickly if necessary(4). Repetition of postpartum haemorrhage(apart from certain incidences) can not be prevented(2).Pregnancy and delivery can therefore be supervised by the phc worker.(refer also 1.2.17)

Conclusion:medium situation (B-->D)

(refer footnote)

Footnote
- According to the procedure outline for execution of the obstetric policy, the decision: medium situation can only be made following a risk consultation procedure, i.e. after the obstetrician has been asked for advice. (B-->D).
- During the risk consultation procedure, i.e. preceeding the decision:medium situation it will be decided whether the obstetrician will be notified when the pregnant woman with medium situation is in delivery suite.

1.2.17 MANUAL REMOVAL OF PLACENTA

Obstetric policy

Chance of repetition of manual removal of placenta is increased(1). Retained products cause serious bleeds and this should be treated in hospital. Hospital birth is therefore indicated. It is not certain that repetition will indeed occur;

prevention is not possible (2) and the condition can not be diagnosed in advance (3); therefore the phc worker can supervise pregnancy and delivery (medium risk). The obstetrician is readily available if this complication does arise and the woman does not have to be transported to hospital any more (as in :postpartum haemorrhage caused by atonic bleed, 1.2.16).

Conclusion: medium situation (B-->D)

Note:
- According to the procedure outline for execution of the obstetric policy, the decision: medium situation can only be made following a risk consultation procedure, i.e. after the obstetrician has been asked for advice.(B-->D).
- During the risk consultation procedure, i.e. preceeding the decision: medium situation, it will be decided whether the obstetrician will be notified when the pregnant woman with medium situation is in delivery suite.

1.2.18 THIRD DEGREE TEAR

General

Not much is known about the chance of repetition of a third degree tear. It is important in these cases to perform an episiotomy in time. Following delivery, careful inspection and suturing is indicated. Circumstances for inspection and suturing should be optimal.

Obstetric policy

Performing an episiotomy in time can prevent another third degree tear(2). If despite the episiotomy another third degree tear occurs, it can be recognised in time(3); suturing has to be performed by the obstetrician(4).

Conclusion: primary obstetric care (A)

1.2.19 SPONTANEOUS SYMPHYSIOLYSIS (IN INTERVIEW)

Obstetric policy

This is a harmless but irritating complication; chances of repetition are increased(1). Prevention is not possible (2) and there are no adequate intervention methods (4).

Conclusion: primary obstetric care (A)

1.2.20 PSYCHOSIS POSTPARTUM

General

Surroundings as peaceful, normal and familiar as possible during pregnancy and delivery will help prevent repetition of postpartum psychosis. The obstetric caregiver should be aware of signals that indicate threatening repetition.

Obstetric policy

Repetition chance is slightly increased(1), but prevention is not possible(2). Peaceful, familiar surroundings are important.

Conclusion: primary obstetric care (A)
(preferrably home birth)

1.2.21 MATERNAL AGE

Description

Maternal age indication applies to women who (on the due date) are:
- nullipara age 36 and over
- multipara age 40 and over

General

Nullipara age 36 and over and multipara age 40 and over present more often with:
a. hypertension (especially 40 yrs and over)
b. diabetes mellitus
c. need for stimulation of contractions during delivery
d. instrumental delivery (FE, VE and Caesarian section)
e. APGAR score below 7 (especially 40 yrs and over)
f. admission to special care baby unit
(The number of pregnant women over age 40 is very small).

Obstetric policy

ad a and b : with hypertension and diabetes mellitus presenting during pregnancy, the obstetric policy will be determined as in 2.18 and 2.17

ad c, d, e and f : the increased risk of these complications(1) can generally not be prevented(2). The phc worker can recognise complications in time as they arise(3). Specialist care by obstetrician or paediatrician can be offered quickly if the pregnant woman is already at the hospital.

Conclusion: medium situation (B-->D)

Note:
- According to the procedure outline for execution of the obstetric policy, the decision: medium situation can only be made following a risk consultation procedure (B-->D).
- During the risk consultation procedure, i.e. preceeding the decision: medium situation, it will be decided whether the obstetrician will be notified when the pregnant woman with medium situation is in delivery suite.

1.2.23 GRANDE MULTIPARA

Obstetric policy

Grande multipara have an increased risk of a number of complications that can arise during pregnancy. The phc worker can recognise these complications in time if they arise(3). The obstetric policy can be decided upon with this in mind. Grande multipara alone (i.e. without any further indications) is no reason for specialist intervention.

Conclusion: primary obstetric care (A)

2.1 INTERCURRENT DISORDERS

Description

In principal every condition can appear during pregnancy. If a condition is of a temporary nature and has no interference with the course of pregnancy and delivery, it is not considered to be an intercurrent disorder.

Examples (amongst others)
- infections:"flu", respiratory infections, sinusitis, urinary tract infections, pyelitis (refer 2.3)
- hyperemesis gravidarum (refer 2.12)
- medication (only if no unknown or high risk): if necessary consult National Poisons Centre (refer 1.1.D.1)
- contact with dangerous substances; if necessary consult National Poisons Centre
- abnormal result from cervical smear (refer 1.1.C.6 and 2.8)
- laparotomy during pregnancy (refer 2.7)
- chorion villi sampling or amniocentesis (refer 2.14)
- bleeding during pregnancy (refer 2.21 and 2.22)
- IUD in situ (when no miscarriage)(refer 1.1.C.8)

General

In the concept of the obstetric indications list it is relevant to question if and how an intercurrent disorder (can) influence the normal course of pregnancy and delivery.

Intercurrent disorders should in principal be treated in the normal way, that is by the GP or specialist if necessary. If the intercurrent disorder has been treated this way and has had no influence on the pregnancy, then the obstetric management can be conducted as planned.

Obstetric policy

Intercurrent disorders should be treated in the normal way; meanwhile obstetric care is provided by the phc worker.

Conclusion: primary obstetric care (A)

If the intercurrent disorder can interact with pregnancy and delivery, then the four questions for the determination of the obstetric policy need answering.

2.2 ANAEMIA

General

Anaemia is relatively more prevalent in pregnancy. In general iron supplementation is to be considered. Further investigation is necessary if the Hb is lower than 6,0 mmol/l (consider sickle-cell anaemia, thalassaemia, leukemia, blood loss etc.)

Obstetric policy

With Hb < 6,0 mmol/l advice of the shc worker is needed in order to decide on the obstetric policy. (refer also: 2.1)

Conclusion: risk consultation (B)
intercurrent disorder

2.3 PYELITIS

General

Pyelitis can be treated adequately by the GP. It is important to realise that the chance of premature contractions is increased. This is, in fact, an intercurrent disorder. (refer 2.1)

Obstetric policy

There is an increased risk of premature contractions(1). It is impossible to prevent this(2), but it can be recognised in time(3), especially when the phc worker is aware that this could happen. If necessary referral to the shc worker can take place.

Conclusion: primary obstetric care (A)
intercurrent disorder (refer 2.1)

2.4 TORCH

a. Toxoplasmosis

General

A primary infection with toxoplasmosis gondii during pregnancy is threatening for the child (especially in the first trimester). Such a primary infection occurs in 12,5 per 1000 pregnant women. Effects for the child can vary from slight to severe. Two percent of children die before, during or within 3 years from birth if the mother remains untreated and 36% of children will show symptoms at birth (blindness, hydrocephalus, mental defects etc.). During pregnancy the risk of miscarriage, premature labour and intrauterine death is increased. Adequate treatment of the mother to the benefit of the child , in the case of established primary infection, is possible and decreases the chance of complications in the child.

Obstetric policy

In the case of proven primary infection (by the GP) with toxoplasmosis gondii during pregnancy, treatment is indicated for the sake of the child. Careful examination of the child is desirable (ultrasound). Referral by the GP to the obstetrician is necessary for treatment and supervision to prevent complications in the child (2,3,4). Since the obstetrician then supervises pregnancy, it is logical to expect him to supervise delivery. After birth the child should be carefeully examined by a paediatrician.

Conclusion: secondary obstetric care (C)

b., c. Rubella, Cytomegalia

General

If during pregnancy the woman becomes infected (confirmed by serology test), chances are that the child will be affected as well, with in the embryonal phase risk of congenital abnormalities.

Obstetric policy

The effects of rubella and cytomegalia infection for the child cannot be prevented (2). Furthermore, abnormalities in the child, if present, do not need immediate treatment. Transport to hospital can safely take place after delivery if necessary. As far as the mother is concerned, an infection like this belongs in the category: intercurrent disorders (refer 2.1)

The child should therefore be examined carefully following delivery (including blood tests: leuco, thrombo, serology, amongst others); this way complications in the child can be discovered early and specialist help be called in.

Conclusion: primary obstetric care (A)
intercurrent disorders (refer 2.1)

d. Herpes simplex

Obstetric policy

In the case of active herpes genitalis consideration should be given to delivery by Caesarian section in order to prevent infection of the newborn. A risk consultation procedure may be necessary to determine the necessity of a Caesarian section.

Conclusion: risk consultation (B)

2.5 HEP.B-ANTIGEN POSITIVE DURING PREGNANCY

General

Hepatitis-B during pregnancy is an intercurrent disorder. The child can become infected during delivery if the mother is Hep.B-antigen positive. In cases like this therefore, passive and active immunisation of the child is necessary following delivery. It is important to realise that the blood of the Hep.B_antigen positive mother is also contageous to others (in particular the obstetric caregiver).

Obstetric policy

As far as the mother is concerned, this is an intercurrent disorder (refer 2.1). Prevention of infection of the child is not possible but immunisation will prevent the child contracting hepatitis B. The obstetric risk is not increased.

Conclusion: primary obstetric care (A)
intercurrent disorder(refer 2.1)

2.15 SUSPECTED FOETAL ABNORMALITIES

Obstetric policy

Antenatal procedures are indicated if foetal abnormalities are suspected. Consultation with the obstetrician to determine the obstetric policy is desirable if foetal abnormalities are proven or considered very likely. The determining factors for the establishment of obstetric management should be used.

Conclusion: risk consultation (B)

2.17 GESTATIONAL DIABETES

Description

Gestational diabetes is a more or less severe disturbance of carbohydrate tolerance during pregnancy. The condition is transitory. There is no consensus about the criteria for diagnosis, not in The Netherlands, nor abroad. Different (university)hospitals use different tests(day-curve, lunch and/or glucose tolerance test) and different limits (glucose levels in blood).

Note:

- The diagnosis is clear with Insulin Dependant Diabetes Mellitus
- The phc worker is advised to consult with the obstetricians with whom she/he usually collaborates about the criteria for diagnosing gestational diabetes.
- The limits for a woman with a pregnancy of less than 28 weeks are different from those of a woman with a pregnancy of 28 weeks or more.

Obstetric policy

Gestational diabetes increases the chance of a number of complications(1). Only intensive specialist supervision can prevent(2) and recognise(3) them. Adequate intervention is only available in the secondary obstetric care(4).

Conclusion: secondary obstetric care (C)

2.18 TOXAEMIA

Description

Toxaemia is a condition during pregnancy characterised by hypertension, sometimes combined with proteinuria and/or abnormal weight gain. Toxaemia should be suspected if during pregnancy the diastolic blood pressure increases 15 mm Hg or more, compared with the pre-pregnancy level. If the pre-pregnancy blood pressure is not known, then 90 mm Hg is accepted as the upper limit for normal diastolic pressure.

Internationally toxaemia as an illness is under discussion; the fact that The Netherlands in this discussion has its own opinion, makes it difficult to give an exact description of toxaemia.

General
- For a correct assessment of the blood pressure it is necessary to measure it in the same position, on the same arm, using a calibrated cuff and the same (calibrated) tonometer. The Medical council advises to accept phase V of the Korotkoff-tones (this is when artery-tones disappear) as the limit for diastolic pressure.
- The height of the diastolic pressure and the amount of proteinuria are the most important parameters for toxaemia. With toxaemia the symptoms are the most important feature, not so much the complaints.
- Isolated, non-infectious proteinuria can mean toxaemia.
- Weight gain in itself is not a criterium for toxaemia.

Obstetric policy

a. If the diastolic blood pressure is 95 mm Hg or more, consultation with the obstetrician is necessary: risk consultation (B)
b. If the diastolic blood pressure (with repeated assessment) increases 15 mm Hg or more in the first trimester of pregnancy in a woman who had a normal blood pressure:
risk consultation (B)
Further advice from the shc worker is desirable in a case like this, to establish obstetric management.
c. Additional factors that could be important (i.e. general condition, parity, willingness and possibility to follow advice re.:diet and rest, foetal developement) should differentiate the policy under a. and b.
d. If blood pressure (and/or proteinuria) normalise, supervision by the phc worker is well possible, particularly if the increase in blood pressure was not severe.
e. Repeatedly assessed non-infectious proteinuria in a pregnant woman with normal bloodpressure is a motive to ask for specialist advice: risk consultation (B)
f. Toxaemia in a previous pregnancy in itself is not a reason to ask for specialist advice or supervision. Toxaemia can be recognised in time in a new pregnancy if it occurs: primary obstetric care (A)

2.21 AND 2.22 BLOOD LOSS DURING PREGNANCY

Description

It is usual in obstetrics to discriminate between blood loss in the first and second half of pregnancy, that is before and after the 20th week. The reason is that the frequency as well as the severity in those two periods are very different. This subdivision however does not totally conform with the subdivision as used with miscarriage and premature labour.
Blood loss during pregnancy should be regarded as a symptom.

2.21 BLOOD LOSS IN THE FIRST HALF OF PREGNANCY

General

Possible causes of this symptom are:
a. threatening miscarriage, miscarriage in process, incomplete miscarriage, missed abortion, decidua bleed;
b. molar pregnancy
c. extra-uterine pregnancy
d. threatening premature labour
e. gynaecological causes (vagina, cervix)

Obstetric policy

ad. a
Miscarriage: ultrasound examination can be helpful in threatening miscarriage. Referral to the obstetrician is only necessary with heavy blood loss. The phc worker can further supervise the woman if the (threatening) miscarriage does not occur.
Conclusion: primary obstetric care (A)
intercurrent disorder (refer 2.1)

ad b, c and d
Suspected molar, EUG and threatening premature labour: consultation with the obstetrician is necessary to confirm diagnosis and if necessary treatment. The phc worker can continue to supervise the woman if the diagnosis is not confirmed.
Conclusion: risk consultation (B)
intercurrent disorder (refer 2.1)

ad e
Gynaecological cause: referral to the obstetrician is necessary only if the GP cannot assess and/or treat the cause her/himself. The phc worker can further supervise the pregnant woman. (re: abnormal cervical smear refer 1.1.C.6)

Conclusion: primary obstetric care (A)
intercurrent disorder(refer 2.1)

2.22 BLOODLOSS IN THE SECOND HALF OF PREGNANCY

General

Possible causes of this symptom are:
a. (threatening) premature labour
b. molar pregnancy
c. placenta praevia
d. bleed from sinus-edge
e. placental abruption
f. gynaecological cause

A bleed in the second half of pregnancy can be a symptom of a potentially serious risk for mother and/or child. Primary obstetric care can not always recognise this and/or intervene in time. Secondary obstetric care does have intervention methods available with which the outcome can be affected positively. In any case: further analysis of this symptom should take place.

Obstetric policy

This could be a serious condition(1), for which timely recognition by the obstetrician is necessary(3) to enable adequate intervention(4).

Conclusion: secondary obstetric care (C)

The woman can be referred back to the phc worker if it proves to be a (intercurrent) gynaecological condition.

2.24 DURATION OF PREGNANCY UNCERTAIN

It is essentially important for the adequate supervision of the pregnant woman that there is reasonable certainty about the duration of the pregnancy. (refer also 2.25 and 2.26: Fundal height: small and large for dates).

Determination of duration of pregnancy

From of old the duration of a pregnancy is calculated from the first day of the last period. If however this last period was of very short duartion or involved very little blood loss, or if it was a so-called pseudo-bleed (mucous bleed in an already pregnant woman), it can be difficult to determine the duration of the pregnancy. This also applies of course if the pregnancy immediately follows a post-partum or post-pill amenorrhoea.

Other parameters for the determination of duration of a pregnancy are fundal height, the point in time that the pregnancy test was positive and the date on which movement is felt for the first time. As far as fundal height is concerned: it is important to note that assessment of fundal height is an important means of checking foetal growth (and the amount of amniotic fluid); fundal height is only then a reliable parameter for the duration of the pregnancy if it is certain that the development of the child has been normal until then.

Uncertainty about the duration of the pregnancy: policy

a. If there is uncertainty about dates before week 16, it is indicated to do an ultrasound scan, once between week 10 and 16.
b. If there is uncertainty about dates after the suspected 16th week, it is indicated to do an ultrasound scan, twice with a period of 2-3 weeks in between.

Note:
- Obstetric use of ultrasound should be available to the phc worker as a form of laboratory test (i.e. when indicated she/he requests this test, receives the results and using this information, makes decisions about obstetric management and is accountable for those decisions). Prerequisite is that the ultrasound scan has been interpreted by a qualified sonographer.
- In November 1984 the Medical Chief Inspector of Public Health sent a letter to all midwives, GP's and obstetricians about ultrasound in obstetrics.In this letter it is suggested not to use ultrasound as a routine examination. The letter gives further directives about indications, performance and interpretation of the test.

2.25 FUNDAL HEIGHT: SMALL FOR DATES

Description

If the duration of the pregnancy is reasonably certain and the fundal height is lower than expected and would fit a pregnancy of shorter duration, it is called small for dates. (For the policy in the case of uncertainty about the duration, refer 2.24)

General

Provided the duration of pregnancy is established, small for dates usually means a pathological underdeveloped child. Foetal causes could be: congenital abnormalities, infections, relative placental insufficiency with multiples. Maternal causes: placental insufficiency caused by hypertension, toxaemia, abnormalities of the uterus.

Assessment of fundal height is the most important parameter to determinate the duration of the pregnancy available to the phc worker. If the foetus is small for dates, the first step should be ultrasound scan. The phc worker should have access to (i.e be allowed to request) this diagnostic tool. The result of the test will determine obstetric management.

Underdevelopment can in fact only be established post-partum. In this case the birth weight does not fit the duration of pregnancy.(limit for underdevelopement is related to the "growth-curve of Amsterdam")(refer also 1.2.11)

Obstetric policy

a. If the child is small for dates while there is certainty about the duration of the pregnancy and the first ultrasound scan shows that the measure of underdevelopement is under P 2,3 it is a serious situation(1), requiring specialist evaluation; only secondary obstetric care is sufficiently equipped to prevent(2) (threatening) complications, to recognise them in time(3) and to intervene adequately(4).

Conclusion: secondary obstetric care(C)

b. If the child is small for dates while there is certainty about the duration of the pregnancy and the first ultrasound scan shows that the measure of underdevelopement is under P 10, but higher than P 2,3 it is desirable to evaluate further by asking advice from the shc worker.

Conclusion: risk consultation (B)

There is high risk if, following evaluation the underdevelopement is under P 2,3, if this is not the case, then there is low risk.

2.26 FUNDAL HEIGHT: LARGE FOR DATES

Description

If the duration of the pregnancy is reasonably certain and the fundal height is higher than expected and would fit a pregnancy that is at least 2-3 weeks more advanced, it is called large for dates (For the policy in the case of uncertainty about the duration, refer 2.24)

General

Provided the duration of the pregnancy is established, large for dates can be caused by a wide range of conditions, such as mola hydatidosa, multiples (70%), hydramnios, placenta praevia, macrosomia, myoma.

Assessment of fundal height is the most important parameter to determine the duration of the pregnancy available to the phc worker. If the foetus is large for dates, the first step should be ultrasound scan. The phc worker should have access to (i.e. be allowed to request) this diagnostic tool. The result of the examination will determine obstetric management.

Obstetric policy

With large for dates of at least 2-3 weeks in a pregnancy of which the dates are certain, further advice about the possible cause is necessary.

Conclusion: risk consultation (B)

The diagnostic findings of the shc worker will have to determine the obstetric policy (decision to be made by the phc worker in close consultation with the shc worker).

2.27 POST-MATURE + 40 WEEKS

Description

The pregnancy that passes the due date with more than 14 days is called post-mature, i.e. after week 42 or day 294.

General

- It is important for the determination of postmaturity that in the early stages of pregnancy the correct duration is known.(refer also 2.24)
- Only those pregnant women whose pregnancy has not given any cause for referral until then can continue under the supervision of the phc worker: it is therefore a select group.
- With postmaturity the risks of placental insufficiency and asphyxia increase, so does the risk of perinatal morbidity.
- During the period of postmaturity one should be cautious if the child does not seem to grow any further, the weight of the mother decreases or when the amount of amniotic fluid seems to decrease.

Obstetric policy

An uncomplicated pregnancy without any additional risk factors:the pregnant woman can remain under the supervision of the phc worker until the end of week 42 (day 294)

Conclusion: primary obstetric care (A)

The chance of complications increases quickly (1) after day 294 (from week 43 onwards); only the shc worker can assess them in time (3) and deal with them (4).

Conclusion: secondary obstetric care (C)

2.32 ABNORMAL PRESENTATION, INCL. BREECH

Obstetric policy

Obstetric advice can be necessary to determine whether correction of a persistantly abnormal presentation, including breech, is possible.

Conclusion: risk consultation (B)

If correction of breech or other abnormal presentation is not possible: the shc worker will supervise delivery since only she/he can intervene adequately if complications arise.

Conclusion: secondary obstetric care (C)

2.33 DYSPROPORTION IN 3RD TRIMESTER
2.34 HEAD NOT ENGAGED WHEN LABOUR STARTS

General

- Causes of dysproportion in 3rd trimester can be maternal or foetal: narrow pelvis, big child etc.
- Causes of non-engagement of the head can be:
  maternal: narrow pelvis, myoma, tumor of the ovaries, (physiological in multigravidae and certain categories of foreign women)
  foetal: hydrocephalus, abnormal presentation of the head, high, deflexed. The risk of non-engagement of the head is that when the membranes rupture, the cord can prolaps. This can not be prevented.

Obstetric policy

The causes of dysproportion in third trimester has to be established. The same applies for non-engagement of the head when labour starts in nullipara. The phc worker will decide on the obstetric management based on the advice from the shc worker.

Conclusion: risk consultation (B)

2.38 INTRAUTERINE DEATH

General

It is very important to assess the cause of intrauterine death. Postmortem is therefore indicated if the cause is unclear. (At present organisational and financial problems may be encountered in the case of home birth).

In general, labour will be induced with intrauterine death.

Obstetric policy

- Induction of labour in the case of intrauterine death requires secondary obstetric care (C).
- According to the determining factors the phc worker can supervise the woman during home birth if further diagnostic tests (i.e. postmortem) can be organised (including transportation of the dead child) and arranged financially. Prior consultation is desirable; risk consultation (B)
- Hospital delivery is desirable to facilitate postmortem if this can not be organised following home birth (incl. transportation of the child): medium situation (B-->D).

3.1 ABNORMAL PRESENTATION

Description

This indication refers mainly to breech presentation that has not been discovered during pregnancy. Sometimes is found: high or mobile head and forehead position.

Obstetric policy

Rapid referral to the shc worker is desirable if at the start or during labour abnormal presentation is discovered since only secondary obstetric care has intervention methods available that facilitate a positive outcome. (monitoring of the child, etc.) (4).

Conclusion: secondary obstetric care (C)

3.2 SIGNS OF FOETAL DISTRESS

Description

Meconium in the amniotic fluid and abnormal and/or irregular foetal heart rate during labour can be signs of foetal distress.

General

Foetal monitoring is indicated in the case of signs of foetal distress so that it can be decided in time to terminate labour if necessary. The obstetric management in cases like this will be influenced by the moment in time at which it becomes clear that the foetus is in distress. For instance with 4 cm dilation referral to the shc worker will take place; but if it concerns a multipara and she is fully dilated, it seems better to deliver the child there and then if it is expected that the child will be born quickly.

Obstetric policy

In general foetal monitoring is necessary if there are signs of foetal distress during labour. This can only be done by secondary obstetric care and also only secondary obstetric care can terminate labour if necessary (4).

Conclusion: secondary obstetric care (C)

3.3 FAILURE TO ESTABLISH LABOUR AFTER S.R.M.

General

If the membranes rupture in a full-term pregnancy and external examination shows that the child is fully engaged, while the heart tones are normal, a wait-and-see policy can be adopted if vaginal examination does not take place. The woman has to be in secondary obstetric care within 24 hours if contractions do not start spontaneously, so that labour can be induced.

Obstetric policy

Referral to the shc worker will be considered if after rupture of the membranes labour is not established spontaneously so that the woman will be in secondary obstetric care within 24 hours. Only secondary obstetric care can induce labour if necessary.

Conclusion: secondary obstetric care (C)

3.4 FAILURE TO PROGRESS IN LABOUR

Description

Despite well-established contractions (both in strenght and frequency) there is no progress in dilation during a 4-hour period.

General

Exhaustion of the pregnant woman can result from an early start, a nervous woman, in short; contractions (noticable or not) without the expected dilatation. Intervention can be desirable in these cases. This will usually mean sedation, provided the condition of the foetus is good (heart tones normal, amniotic fluid clear). Sometimes a change of environment starts labour up again.

Obstetric policy

Stimulation of labour should be considered if there is no progress during a 4-hour period despite wel-established contractions.This should be done by the shc worker.

Conclusion: secondary obstetric care (C)

3.5 FAILURE TO PROGRESS IN SECOND STAGE.

Description

This is the case if with full dilatation, ruptured membranes and well-established contractions in a cooperative woman, no progress is made during a 1-hour period.(refer also: 1.2.9).

General

The woman can continue to push as long as labour progresses, provided there are no additional factors and the condition of the foetus remains good (heart tones normal, amniotic fluid clear) until a certain moment in time which should be chosen so that the woman can be under the care of the shc worker within 2 hours of the start of second stage, so that labour can be terminated. This applies to both primi- and multi-gravidae.

Obstetric policy

Delivery should be terminated if second stage fails to progress. This is the job of the shc worker.

Conclusion: secondary obstetric care (C)

3.6 EXCESSIVE BLOOD LOSS DURING LABOUR

General

Blood loss during labour can be a symptom of serious pathology (for example placenta praevia). Mostly however no pathology is found and labour progresses without complications.

Obstetric policy

Blood loss during labour can be a symptom of serious pathology which only the shc worker can care for adequately. This justifies referral when this symptom presents itself.

Conclusion: secondary obstetric care (C)

3.7 PLACENTAL ABRUPTION

General

Placental abruption is a serious condition for both mother and child. Immediate intervention is necessary (artificial delivery, Caesarian section).

Obstetric policy

Rapid referral to the shc worker is necessary in the case of placental abruption, for the sake of both mother and child.

Conclusion: secondary obstetric care (C)

3.8 PROLAPSED CORD

General

Emergency Caesarian section is indicated in the case of prolapsed cord

Conclusion: secondary obstetric care (C)

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