DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY
UNIVERSITY COLLEGE HOSPITAL, IBADAN

LABOUR WARD MANAGEMENT PROTOCOL

First Edition

Editors
A. OLADOKUN . A. A. ODUKOGBE
. O. OLAYEMI

INSPIRATION HOUSE

We want to hear from you. Please send your comments about this book to us in care of ihpng64@gmail.com

INSPIRATION

Inspiration House Publishing,
Plot 2, Akin Ojeh Close,
Off Olembe Bassir Street,
Bodija, Ibadan.
ihpng64@gmail.com
Tel: +234 809 920 7874,
+234 802 337 9173
www.facebook.com/inspirationhouse

Labour Ward Management Protocol

Editors: **A. Oladokun ▪ A. A. Odukogbe ▪ O. Olayemi**

First Edition

First Published in 2020

ISBN: 978-978-57163-9-9

Table of Contents

11. MANAGEMENT OF SHOULDER DYSTOCIA

Dr. B. Akinwumi and Dr. O. O. Ogunbode

Introduction

Shoulder dystocia (SD) is the difficulty in delivery of the foetal shoulders after delivery of the head in cephalic presentations following impaction of the anterior or posterior (rare) shoulder against the pubic symphysis or on the sacral promontory (see figure 1).

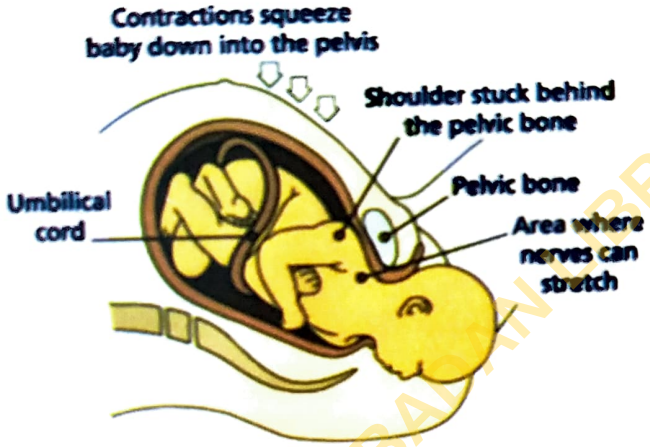

Figure 1. Diagram showing shoulder dystocia *(culled from babycenter.co.uk)*

It is an obstetric emergency with an incidence varying between 0.2 and 3.0% of all live births. Although a few risk factors have been identified (see table 1), 25-50% of cases occur in women without risk factors so this condition ***should be anticipated in all vaginal deliveries***. It often results into maternal and foetal morbidities/mortalities, if appropriate steps are not urgently instituted. Therefore, the goal of management is to ***ensure safe delivery before neonatal asphyxia/injuries and maternal complications set in.***

Antepartum	Intrapartum
• Small maternal pelvis • Obesity • Diabetes mellitus, type I or II • Multiparity • Foetal macrosomia or birth weight >4 kg • Prior SD, instrumented delivery or large for gestational age(LGA) baby	• Post - term pregnancy • Induction of labor • Epidural analgesia • Prolonged second stage
Please, note that SD can occur without risk factors	

Table 1: Risk factors for Shoulder Dystocia

DIAGNOSIS

- Non-spontaneous restitution
- Repeated recoil of the foetal head (turtle-neck sign)
- Plethoric foetal face.

MANAGEMENT

The initial steps in the management include:-

- Diagnose and act as quickly as possible.
- Call for help and obtain assistance from other doctors or midwives available.
- Request for the paediatrician and anaesthetist.
- Clear the infant's mouth and nostrils.
- Stay calm and avoid pulling or pushing on the baby's head.
- Never give fundal pressure as it causes further impaction of the shoulder.
- Perform appropriate maneuvers to deliver the baby.
- Aim to complete maneuvers and complete delivery within 5 minutes.

SPECIFIC MANEOUVERS / INTERVENTIONS

Primary Interventions

A. McRoberts Maneuver.

- First intervention in most cases and requires two assistants.
- ***Abduct, hyperfflex, and laterally rotate the thighs of the mother and also flex the knee of the mother***
- ***Then complete delivery of the rest of the baby.***
- If this maneuver fails, combine with suprapubic pressure (see Figure 2).

This intervention brings the pelvic inlet and outlet into more vertical alignment; flattens the sacrum and rotates the pubic symphysis cephalad; elevates foetal anterior shoulder and flexes the fetal spine and thereby aiding the complete delivery of the baby. The success rate is 42% increasing to 54 – 58% with the application of suprapubic pressure (towards the baby's chest).

B. Suprapubic pressure

- Purpose is to reduce the bisacromial diameter of the foetus.
- ***Apply pressure to the suprapubic region pushing the anterior shoulder of the baby towards baby's chest***

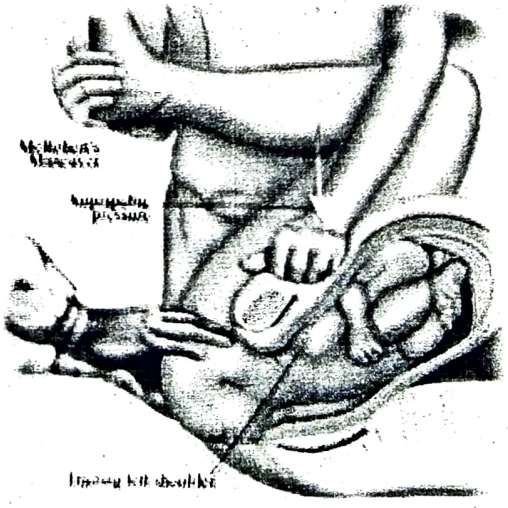

Figure 2: Combination of McRoberts maneouver and suprapubic pressure (*culled from illustrated verdict.com*).

C. Episiotomy.

If A and B fails, perform mediolateral episiotomy

***Secondary Interventions**

D. Woodscrew Maneuver.

- ***Insert your hand into the vagina, and rotate the posterior shoulder 180 degrees clockwise or anticlockwise to the anterior position (see figure 3).***
- Thereafter complete delivery of the baby by gentle traction.

This intervention pushes the bisacromial diam eter from the antero-posterior position diameter to an oblique diameter helping easy entry of the bisacromial diameter into the pelvic inlet.

E. Rubin's Maneuver.

- ***Sweep the most accessible arm across the baby's chest to adduct the shoulders.***
- Thereafter complete delivery of the baby.

**Order of performing secondary interventions may vary*

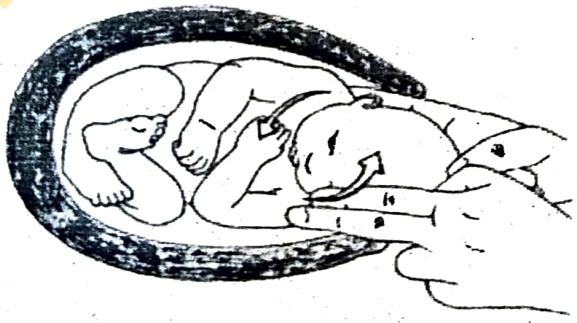

Figure 3: Woodscrew maneuver
(*culled from books.mcai.org.uk*)

F. Delivery of the Posterior arm.

- ***Insert your hand into the vagina, follow the posterior humerus and sweep the arm across the chest while flexing the elbow***
- ***Then grasp the baby's hand and extend along the side of the face, to deliver the posterior arm.***
- Thereafter complete delivery of the baby by gentle traction.

****Last Resort Interventions**

G. Cleidotomy.

- Applicable to both live and dead fetuses.
- Break one or both clavicles to reduce the shoulder girth.
- ***Always break outwards to prevent internal injury.***

H. Symphysiotomy.

- Perform symphysiotomy as indicated.

I. Caesarean Section

- ***Place the woman in "ALL FOURS" position (Gaskin Maneouver) and proceed to perform a caesarean section***

*****Should only be done by the Consultant or with the permission of the supervising/patient's consultant*

COMPLICATIONS

Watch out for any of the following complications and manage appropriately.

a) Maternal: Maternal exhaustion, perineal tears, haemorrhage, vulval haematoma, symphyseal diastasis and obstetric palsy.

b) Fetal: Humeral or clavicular fracture, brachial plexus injury, fetal asphyxia or umbilical cord compression.

Table 2: Summary of the management of shoulder dystocia

HELPERR Mnemonic
H – Help. Call for help from nurses and other doctors.
E – Episiotomy: Evaluate for episiotomy if not previously given.
L – Legs: McRoberts maneuver.
P – Suprapubic pressure: Combination of this and Mc Roberts maneuver resolves most cases.
E – Enter: Internal maneuvers to rotate the shoulder such as Woodscrew and Rubin's maneuvers.
R – Remove: Delivery of the posterior arm and subsequent delivery of the whole baby.
R – Roll over. Gaskin maneuver (ALL FOUR's position).
Please note that the order of maneuvers may vary, and additional ones may be done. However, all maneuvers done must be documented properly.

INSPIRATION HOUSE

978-978-57163-9-9

CLINICAL PROTOCOLS/
OBSTETRICS AND GYNAECOLOGY