

Squatting in Labour and Left Lateral Births for Posterior Position

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Introduction

Any assessment of the role of Midwifery Education at the Basic level has to be based on the assumption that there are certain commonly accepted norms and values. However, these yardsticks are relative to time and place. For instance, the last few years of technology, religious, social, economic and political creeds have been re-written often beyond recognition of the basic physiological situation that was, and is, in existence. This transition, transformation or revolution, by whatever name you call it, is intimately woven into the fabric of education to find its existence.

A logical imperative of the resultant situation is that the educational system preparing cannot afford to be static. It must have the sense and sensitivity to respond constructively to the changing conditions. It is against this background that the role of squatting for birth with its various movements of flexibility responding to positions that are physiological for each birth have been studied by midwives and obstetricians, who have in various ways been proving what nature in its great physiological means can accomplish, and what it can teach the professionals to research and document.

Some time back the World Health Organization (WHO) had published the fact that 75% of all births are in the hands of the Traditional Birth Attendants (T.B.A.s). Although no statistics have been put together, it is most probable that a high percentage of self-aid births witnessed by the T.B.A.s are in the squatting position, or in the higher sitting position, or squatting on the 'birth stools'. In the total vertex presentations, 20 to 30% are said to be of posterior position. Thus, it proves that the T.B.A.s are assisting in the natural physiological position for the normal expulsive uterine forces for the correct passage-passenger relationship to aid births.

I have worked in the rural India, in the Community Development projects of Najafgarh and Singur, and witnessed such births, and can speak with confidence for the easier, shorter and the normality of the results of natural forces in the process of births in comparison to the positions for births used in the Western world. The positions used in hospitals, apparently, have been designed for the convenience of the professionals. And now the woman has to subject herself to the conveniences of the many machines that are needed for monitoring her labour

and the baby, which prevents her freedom of ambulation and squatting. More and more the modern professionals will not be exercising their knowledge and skills due to dependency on machines. The labouring woman will, thus, be left with little or no choices. In spite of the many disadvantages of the lithotomy position, see Figure 2, practitioners continue to use their preferred positions for delivery as documented by Haire (1972), Newton, M., and Newton, N. (1972), Liu (1979), Carr (1980), and Roberts (1980).

Dr. Yehudi Gorden, speaking at the Second International Conference on Active Births, reported that the supine position decreases the uterine activity and causes longer and more painful labour. This in itself would lead to operative Obstetric procedures which could be avoided if ambulation and squatting was used in practice. The 30° to 45° upright propping for effective intra-abdominal pressure for the natural augmentation is necessary for the bi-polar uterine actions and the birth expulsion. This is a body physiological need. I consistently found the need to teach and direct the student midwives to assist and support the woman in labour throughout the intra-partal stages, for it is important to 'be with the woman' in labour to guide her. In recent years there have been many scientific searches for answers which apply to positions and squatting effects in labour. (Newton : 1956-1960; Caldeyro Bracia *et al* : 1960; Kutner : 1980; and Diaze, Schare, Fescine : 1976.) The historical and anthropological accounts of birth practices are by other writers as Jarcho, J., (1933) and Jarcho, J. (1934) in which the scientific searches give evidences for postures and practices during labours among primitive people. The rhythmic rockings for rotating movement of the pelvic girdle have been described by J. Balaskas and A. Balaskas (1979). In India, the hospital maids desired to squat and mop the floors, turning from one side to the other while in labour, and when they were ready to bear down, the woman sat up on the table to give birth. What was more important, the baby nursed at the breast soon after, thus the uterine forces were augmented in the most natural way for the expulsion of the placenta in the correct axis for completion of complete delivery.

Freedom for Positions is Helpful

The importance of the changes of the pelvis, and its flexibilities in pregnancy are documented in Roentenological measurements by Moloy's Evaluation of the Pelvis in Obstetrics (1959) and R.H.

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Hamlin, in his *Clinical Diagnosis in Labour* (1965). Such readings would give better understanding of how freedom for positions helps the angle of inclination of the brim by squatting. How the greater than 135° can effect the axis of the uterine forces into the axis of inlet by correcting this angle. Note in Fig. 1 and Fig. A2, that the deflexed attitude in the posterior presentation is assisted to flex and enter the brim, and the deep transverse arrests of mid-cavity in the posteriors can be avoided, which is not due to the C.P.D. (Cephalo-Pelvic Disproportion). When forces are applied to the correct pelvic planes asynchitism, the Nagele's obliquity is helped with the added rocking and swinging of the pelvic girdle to the squatting.

The supine hypotensive syndrome and its effects are documented by many, as Scott & Kerr (1963), Goodlin (1971), Bond (1973), Sacks, Bell, Schwimmer, Schrifin (1980) and many others have propounded on the need for ambulation and activity during first stage of labour. What Diaz, Schwarcz, Fesciva, Caldeyro Barcia, are saying in 1980s, are exactly what the poor traditional people practise as their best alternative for giving birth right upto the second stage. The adverse haemodynamic effects can be prevented for posterior presentation deliveries, by using the Rotunda method or delivering on the left lateral position, which prevents the compression of blood vessels and therefore O^2 for baby, at the same time prevents the resistance of the bed on the sacrum and coccyx, thus aiding the normal extension of the vertex for birth, as well as relieves the pressure on the perineum and minimises the need for episiotomy. It must be remembered that the Rotunda method of Ireland enhances the positive effects of traction on the symphysis pubis, and the 30° to 45° propping maintains the gravity needed (Mongert and Murphy: 1933).

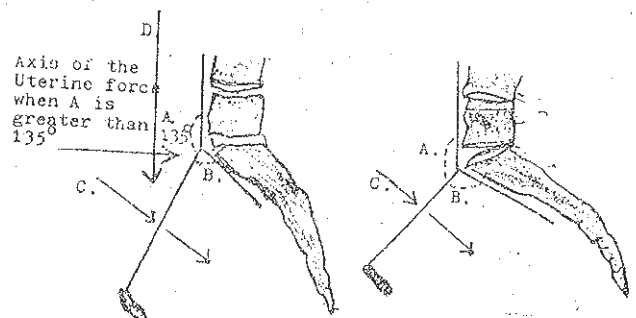
Squatting in pregnancy becomes easier, as the collagen softening of the pelvic joints becomes maximum by turn, thus the best results are with exercises pertinent to the passage—passenger relation for the stretch effects and birth. (Limburg, A. and Smulders, B.: 1983). The .5 to 2.0 c.m. increase in the coronal and sagital diameters of the pelvic outlet is equivalent to represent 30% increase. This has been radiologically documented by Young in 1940 and Vaughan in 1937, Russell (1969), Fermstream (1967) and Ehrstram (1978). The squatting position enhances the backward movements of the coccyx, as the vertex pivots on the S.I. joints, especially when the torso is bent forward. (Ehrstram: 1978, Limburg, and Smulders; 1983, Russell; 1969). What such research is stating was practised naturally and witnessed in the squatting and mopping the floor with the movement from side to side, which is alternately bending of the torso. What could be better for the presenting part than to touch the specific pelvic planes with the uterine forces in the correct directions for the rotation needed in the mid pelvis, when traumatic forceps manipulations can be avoided.

Newtonian Law of Gravity

The above authors and many other litterateurs are documenting the old and natural practices of births that were used and are being used. Squatting enables the widening of the pubic arch, the inter-ischial spines and the tuberosity measurements for the mid-plane and outlet. There is a 1.5 c.m. increase in the sagittal surface of the canal, which favours the early descent with flexion for rotation, when the squatting position is used. Again, in Newton's Law of Gravity, whatever touches the pelvic floor first rotates the $1/3rd$. to O.A. Thus the vertex when not flexed touches the pelvic floor first with the 'sinciput' and will rotate to O.A., causing the face to pubic birth, resulting in prolonged second stage. However, in the case of the Anthropoid pelvis the P.O.P. births are relatively easier due to the A.P. diameters being larger.

Great professors of Midwifery of the University of Glasgow as Ian Donald and others such as R.H.J. Hamlin, have stressed the importance of 'Clinical Diagnosis in Labour' and written books. They have emphasized the normality, which is Midwifery to Medical and Midwifery students. The Midwife sees the importance of squatting and with knowledge applies her support towards normality. The pertinent diagrams in Fig. 1 to Fig 5 are from Margaret Myles, (1956) given here for the basic recognition of the posterior position, and the evaluation of pelves related to posterior presentations in Fig. 1. to Fig. A2. is from Maloy's (1956) which explains the need for squatting.

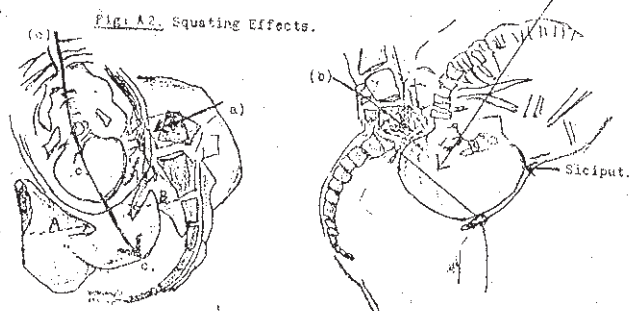
Fig. 1. Squatting Physiologically Alters Angles and The Axis of Uterine Forces



- A: Angle of inclination of the brim.
- B: The Sacral angle, which indicates the obstetric value of pelvic cavity.
- C: The axis of the inlet.
- D: The axis of the Uterine force.

The modern world of Obstetrics needs to practise for experience what natural powers can do for the process of births in the physiological positions of squatting and left lateral, for they bring about the best results in all the variations of the pelves for normal deliveries in the absence of disproportion. Munro Kerr's extensive and intensive book on *Operative Obstetrics* (1908) is a good reference for Mid-

Fig. A 2. Squatting Effect



- Squatting diagrammatically shown correcting 135° angle to less.
- Squatting corrects the deflexed attitude in O.P. Engagement becomes more physiological.
- Squatting corrects the axis of the uterine force for best application to pelvic inlet, the pelvic planes are thus applied well for rotation.
- Relieves adverse haemodynamic effects.

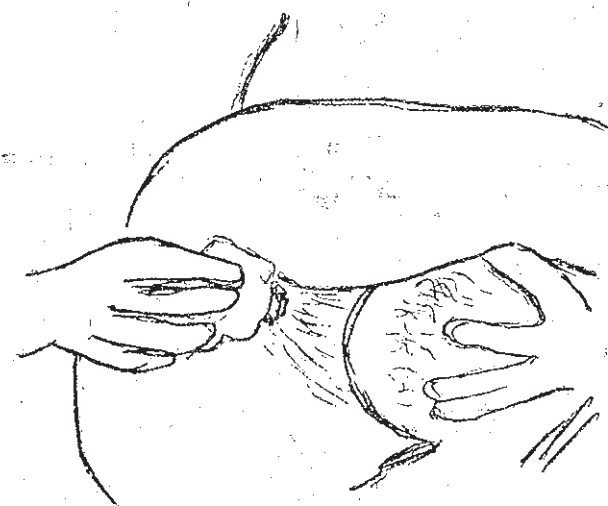
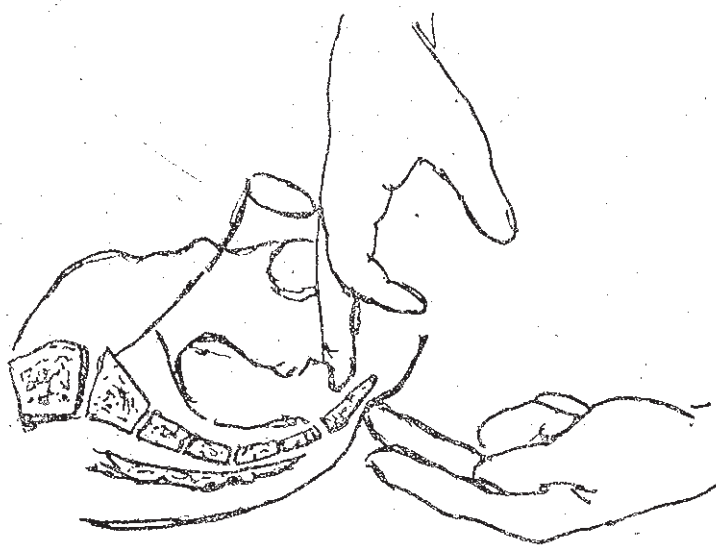
wives' use. He has a conversational force of writing for good comprehensive understanding. It is the deviations of the Passenger, the Powers (the uterine force) and the Passage (the pelvis) that the Midwife needs to master to foster normality for the best results for mother and baby. The continued promotion of the normal physiological positions for birth will remain the Midwives' goal.

The brief insight into the most physiological squatting position, and the left lateral position for labour and birth, should be followed by talks on Occipito Posterior positions, known as the *bête noire* of Obstetric practice and another couple of hours' talk on 'trial of labour', without which the complete grasp of squatting position for birth will remain incomplete.

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Fig. 2. (a) : The Recumbent and Lithotomy Positions Exerts pressures on the Sacrum and Coccyx



(b) The Left Lateral at 35° to 45°, known as the Rotunda Method of Ireland

- This position can be self management for the woman, as is in the squatting position.
- The position relieves the haemodynamic pressures that depletes O₂ to baby.
- The position relieves pressures on the perineum, and the need for episiotomy is minimized.
- The position frees the pressures on the sacrum and coccyx thus extension for birth is physiological.

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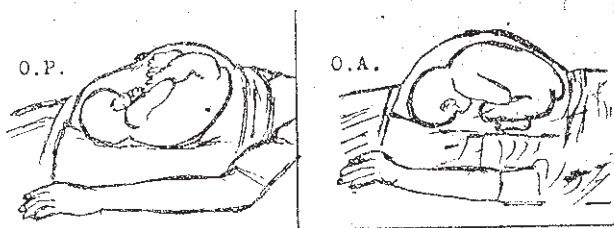
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Fig. 1. OCCIPITO POSTERIOR POSITION.
ON INSPECTION LYING.



ON INSPECTION STANDING.

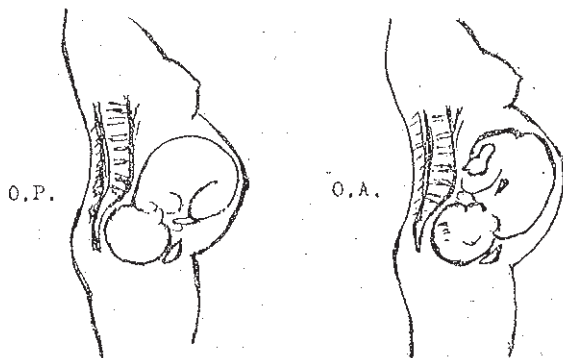


Fig.2. ON PALPATION and AUSCULTATION.



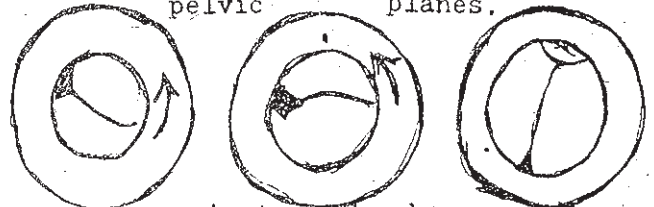
On palpation the unequal PAULIC'S grip is recognised, when the 'sinciput' is felt higher and prominent. Fetal movements are visible and felt easily.

AUSCULTATIONS are heard on the flanks, and distant. When heard loud and clear on the opposite side in the O.A. position, the position of the fetus is usually mis-diagnosed

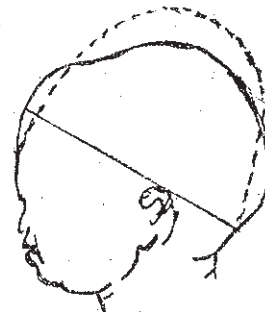
Fig: 3. THE NORMAL OCCIPITO POSTERIOR ON EXAMINATIONS IN LABOR.

Occiput & Sinciput above brim	Sinciput rises,	Occiput below brim.

This normal flexion is heped, when ambulation sitting up, walking and squatting in active stage is used, as the uterine forces are in the correct axis to the pelvic planes.



Thus the occiput as the denomonator Touches the pelvic floor for the 3/8 rotation to O.A.



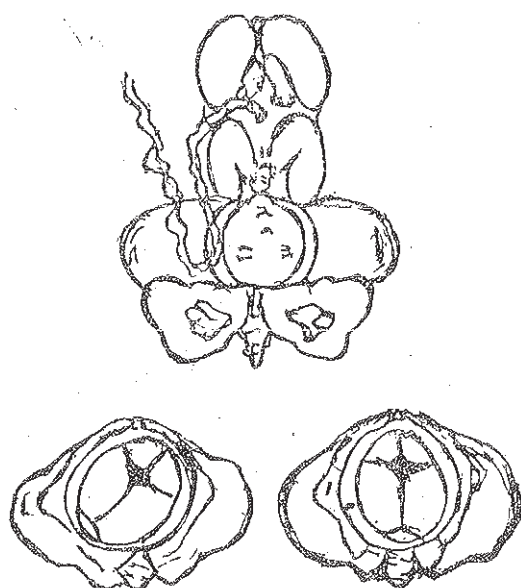
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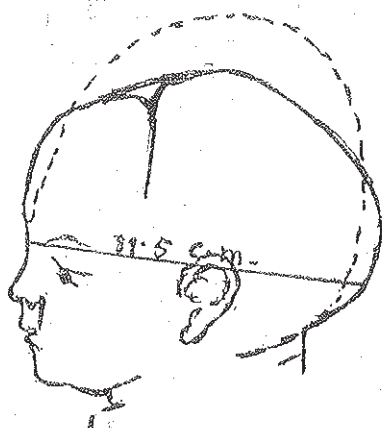
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Fig: 4. OCCIPITO POSTERIOR POSITION, UNREDUCED, P.O.P.

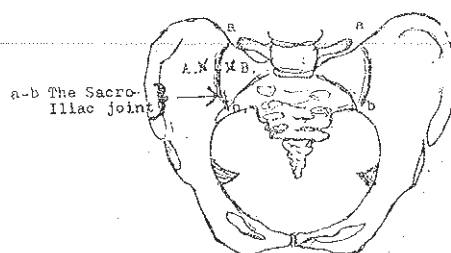


THE FACE TO PUBIS BIRTH.



THE SUGAR LOAF MOULDING, of the U.P.O.P. birth.

Fig: 5. The Location of Occiput in the POSTERIOR POSITION.



A. x. = Anterior to the sacro-iliac joint.
B. x. = Posterior to the sacro-iliac joint. In this situation the occiput seldom rotates the 2/8th. to the U.A. Thus the face to pubis birth is evident, and becomes the UNREDUCED PERSISTANT OCCIPITO POSTERIOR BIRTH. (U.P.O.P.)

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