

Obstetric handling of a deaf patient

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ABSTRACT

We report our experience of obstetric handling of a deaf pregnant patient antenatally, in labor and postpartum. The patient was deaf from childhood. The attending obstetrician had no training in the necessary skills for communication with the deaf. Fortunately, the patient could read and write English very well and communication was carried out through pen and paper. This proved to be difficult, time-consuming and required a lot of patience. The clinical, psychological and human aspects of the management were gratifying. The patient brought up interesting aspects that need to be considered when dealing with similar patients. Experience of deaf mothers and their ingenious approaches in dealing with babies, in the postpartum period, are quoted in this communication.

Keywords: Obstetric, handling, deaf, pregnant, patient, communication.

Saudi Medical Journal 2000; Vol. 21 (12): 1185-1188

Childhood hearing impairment may be hereditary or acquired.¹ Deafness has been reported to be a low-prevalence disability with about 200 cases per 100,000 persons in the general American population.¹ Every year 1 in 1000 children is born with severe to profound hearing loss, and 4 to 5 children per 1000 have a hearing impairment significant enough to affect language acquisition.¹ In Saudi Arabia, the problem may be more prevalent, probably due to the high rate of consanguineous marriages. A random survey of 421 Saudi infants and children conducted in the Riyadh area, Saudi Arabia, showed that the rate of hearing impairment among all children surveyed was 8%. When children who had siblings with hearing problems were considered separately, the prevalence rate among them was found to be much higher at 25% while 7% of children with normal hearing siblings had hearing disability, ($P < 0.001$).² Meningitis is the most important cause of acquired postnatal deafness and neurologic disorders in children.³ The later deafness is acquired the better the ability to communicate in a hearing society.⁴ We present the obstetric handling of a deaf patient married to a deaf husband. Both of

them became deaf as a result of childhood meningitis.

Case Report. A 30 year old Saudi lady, deaf since she was 4 years of age due to childhood meningitis, presented to the accident and emergency department of the King Khalid University Hospital, Riyadh, Saudi Arabia in labor at term. She has been married for 12 years to a deaf husband who is not her relative. She was gravida 2 para 1. Her first 4 year old daughter was delivered through lower segment cesarean section at 38 weeks gestation in Al-Madinah-Al-Monawarah Hospital, Saudi Arabia, because of placenta previa. Her blood group was AB rhesus positive, she was rubella immune and all other booking investigations were normal. She has had 5 uneventful antenatal visits. It was noticed during the antenatal follow-up, that she reads, understands, and writes English perfectly well. She had 2 ultrasound scans. The first was at booking and agrees with her dates. The second ultrasound carried out, when she was 38 weeks by her dates, on March 1, 1999, showed a single, normal, live fetus with a biparietal

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Received 31st July 2000. Accepted for publication in final form 3rd September 2000.

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diameter corresponding to 38 weeks and an anterior upper placenta, normal liquor volume and estimated fetal weight of 3.3 kg. The patient came to the labor ward at 5:00 am where she was received by a midwife who on seeing her card called the doctor on-call. As verbal communication was not possible, the patient gestured for a pen and a paper and a long written dialogue started with a doctor in the team. Below are a few representative excerpts without editorial modifications:

Patient: Can you write to me what is wrong with me? Please tell me.

Physician: What is your problem?

Patient: Pinkish vaginal discharge and severe pain in my lower pelvis.

Physician: (After reading her cooperation card). Maybe you have labor pains. Can I examine you?

Patient: I want to be examined by a Lady Doctor.

Physician: There is no Senior Lady Doctor-on-call. I am the most Senior here. I better examine you as you have a previous cesarean section.

Patient: Yes, I have but this time, the placenta is upper. I am not comfortable with a man.

Physician: You have an operation before; I better examine you to assess your pelvis. I hope you will be able to deliver normally this time.

Patient: Okay. Please give me gently (After obstetric general, abdominal and pelvic examination).

Physician: Your baby is average size coming by the head and your pelvis is clinically okay. You are in labor. The neck of the womb is open 3-4 centimeters.

Patient: How much does it need to open?

Physician: To deliver, it needs to open to 10 centimeters.

Patient: When?

Physician: Today Inshallah. (with the will of Allah) It opens about 1-2 cm per hour.

Patient: Okay. (After a pause) I am sorry to keep you waiting for my conversation long. Thanks for your patience.

Physician: You are most welcome. We are all here to help you through your labor. By the way, where did you have your operation cesarean section? When? and Why? Where did you study?

Patient: In Al-Madina-Al-Monawarah Hospital because of the lower placenta. I had studied in America for 10 years and my husband was (studying there) too. He is deaf. My daughter is 4 years old.

Physician: (After assigning a midwife to the patient) Please, when the pain is severe, let us know so that the midwife can give you some injection or a gas mask for the pain.

Obstetric follow-up. She was assigned to a midwife who was informed to communicate with the patient by written conversation. She was kept on continuous electronic cardiotocographic monitor. The labor onset was about 4:00 am at home. She presented to the Labor Ward at 5:00 am when she was examined by a doctor in the team. She was then at 3-4 cms of cervical dilatation. She received pethidine 100 mgs and phenergan 25 mgs intramuscularly at 9:20 am because of severe labor pain. Her labor progress was satisfactory. She had spontaneous rupture of membrane at 11:00 am and spontaneous vertex delivery at 11:40 am of a baby girl who cried immediately with an apgar score of 9 and 10 after 1 and 5 minutes. The birth weight was 3.4 kgs. The patient and her baby were discharged home the next day. She was given a 6 week

appointment in the postnatal clinic.

Post-partum follow up. Six weeks postpartum, the same doctor who attended the delivery saw the patient in the follow-up visit. Again a written dialogue was carried out. The patient was advised about her baby-care, postnatal exercises, and family planning. She was also asked to write her impressions and suggestions about the care she had received during her pregnancy, labor and delivery. She stated that "some of the care was good and some was not-so-good". She was generally embarrassed by the communication difficulties. She wished she had been seen by the same team every time she came to the hospital during her antenatal visits, and during subsequent management. She was especially annoyed when she almost missed her appointment one day while she was physically waiting to see the doctor. The reason was that she did not hear the nurse call her name and she was taken for no-show. Later she complained about the delay and discovered the problem. She wished people would recognize her problem and act accordingly. "Why didn't the nurse write my name on a sign board or something?" she demanded. "Why doesn't the hospital provide sign-language interpreters?"

DISCUSSION. Pregnancy, labor and delivery are physiological but distressful situations. Tender loving care and patience in communication are essential for all patients in labor. This is even more so for handicapped patients, particularly so if they are deaf. Much more time and effort are involved in caring for deaf than for normally-hearing patients.⁵ Deafness is a deficiency that none of the health-care providers that managed this patient had any prior knowledge in dealing with. Fortunately, our patient was fluent in reading and writing English. The written English dialogue used during the care of this patient was time-consuming and laborious. However, the results were gratifying. The views expressed by the patient were simple and of common sense. Yet it is surprising how simple things can be missed in the provision list of a hospital. Deaf patients more than others, need continuity of care in one to one clinic nursing, and to be seen by the same doctor each visit, so as to develop sufficient rapport, confidence and skills in communication. When the patient comes to the clinic she needs a companion who hears normally so that the patient responds when her name is called. Alternatively, she should be allowed to walk-in. This is mainly to avoid embarrassing the patient by showing she is deaf whenever she visits the clinic.⁶ On calling her name the clinic nurse should not obscure her face by the file to facilitate lip reading. Other factors that impair lip reading are accents, speech impediments, fingers, pencils, dim lighting, bright background lighting and situations involving more than one or 2

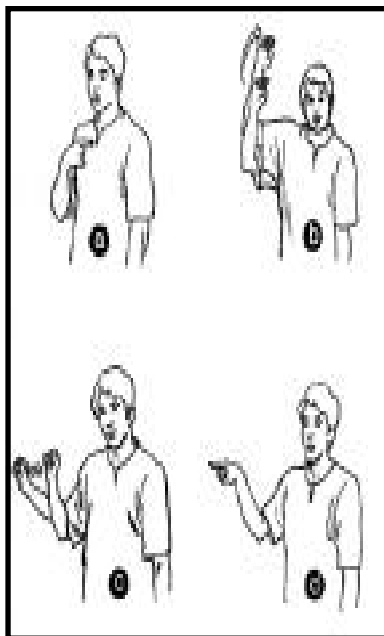
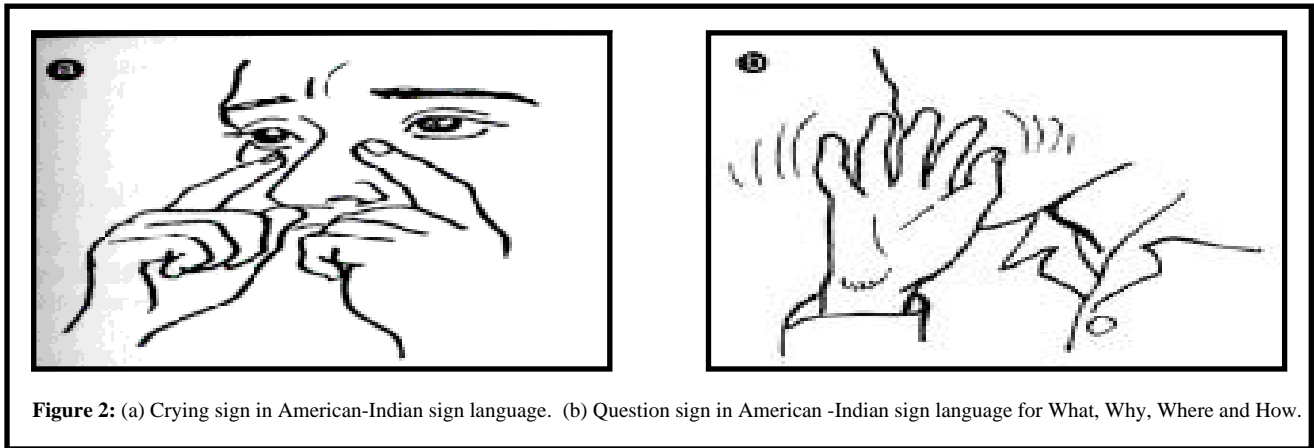
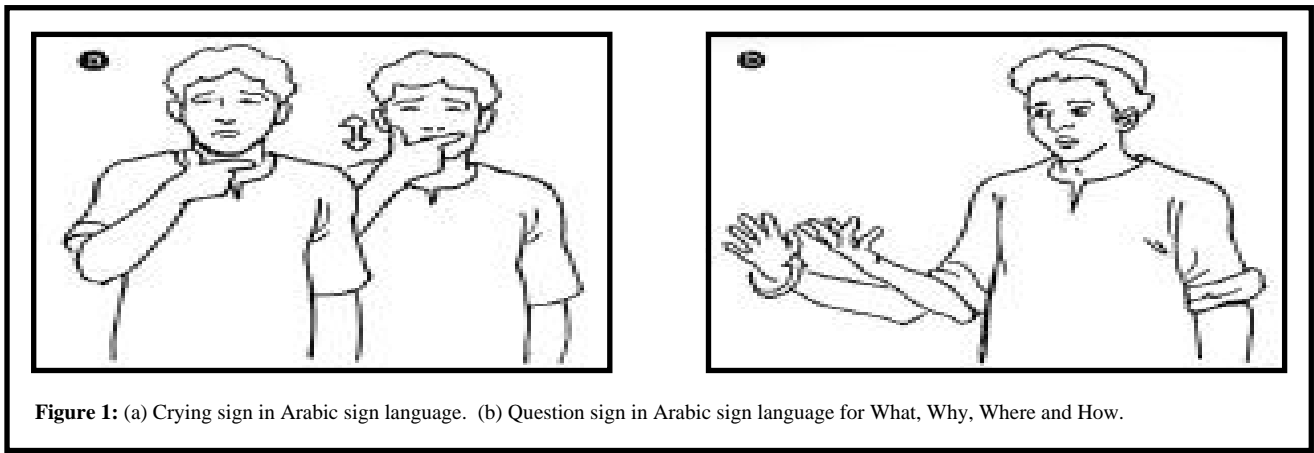


Figure 3 - (a) "Me" (b) "Adult" (c) "his and her's" (d) "you".

Figure 4 - Arabic alphabet fingers spelling signs.

persons.⁴ In the written dialogue with a deaf patient, it is important to use simple plain language and avoid medical terms as much as possible, as was carried out in this case. Writing is time consuming and therefore inhibits facile communication.⁴ If available, a special interpreter for the deaf would therefore be preferable. Ideally each clinic should provide an interpreter who can communicate with deaf patients. Sometimes companions who know how to communicate with the patients may be very helpful. The fact that the patient is deaf, and the best possible means of communication with her, should be clearly written in the patient file and her cooperation card. This information made life easy when our patient was first seen in the labor room by the on-call attending midwife and the doctor. The management of labor in deaf patients requires a midwife who understands the aforementioned means of communication. Symptoms may not be expressed well by the patient, especially if the patient is also mute (due to childhood deafness). We had to depend on clinical signs rather than symptoms, for the most part, in suspecting or detecting problems to the mother or fetus. For this reason, in the first stage of labor, the patient needed continuous electronic monitoring and a partogram. During the late 2nd stage, it is recommended that deaf patients need 2 midwives; one to pass-on the instructions with her face up for the patient to see and the other to conduct the delivery.⁷ In the postpartum period, family help is crucial. Fortunately our patient lived with her parents in-law. A community midwife and a social worker are essential members of the caring team and they need to develop some communication skills with the deaf. In the postpartum period, deaf mothers may not wake up and respond to the needs of their babies. However, one patient who had twins, mentioned that she "sensed her babies' needs" and instinctively woke up in exactly the right time.⁷ The same patient said that her husband (an electrical engineer) designed for her a light-system that flashed whenever the baby cried. The role of the social worker and community midwife is to try and provide such a device.⁷ The husband can be of great help if he is not deaf. The forms of communication with the deaf include Arabic sign language Figure 1A and B,⁸

American/Indian sign language, Figure 2A and B,⁹ vocalization, lip reading, head eye movements, facial expressions and hand gestures Figure 3A, B, C and D.⁸ Other useful forms of communication and learning for the deaf is finger spelling with the use of Arabic alphabet Figure 4⁹ and English alphabet.

In conclusion, the obstetric care of a deaf patient is challenging. It needs a consistent team of the same doctors, clinic nurse, midwife, social and community workers. The ideal home environment is also essential. Labor should be a pleasant experience. Without the ability to communicate properly, the labor experience will be horrifying and frightening particularly so to deaf patients.

Acknowledgments. The authors would like to thank Professors Hassan Abu-Aisha, and M. O. Gad Al-Rab for his advice and review of the manuscript and Mr. Altayeb Fadl Al-Sayed and Miss Miriam Culanding Tamos for their secretarial work and Mr. Virgilio Salvador for the illustrations.

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