THERAPEUTIC ULTRASOUND IN POST-PARTUM BREAST ENGORGEMENT

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Two cases are described, one being breast engorgement 3 days after delivery, the other an incipient breast abscess occurring 4 months after delivery. Both were treated successfully with continuous ultrasound.

The following are brief histories of two cases, typical of many treated with continuous ultrasound, over the past 5 years.

Case 1

Mrs T, 26 year-old primipara, was admitted to Bathurst District Hospital and progressed to normal delivery of a living female infant on 4 September 1979. Three days after delivery the mother’s right breast became engorged, being hard uniformly through all areas, including a grossly oedematous areola, and was uniformly painful throughout. The baby was unable to obtain any milk at all from this breast, but was able to suckle the left breast. The patient had tried to express from the right breast under a hot shower on several occasions without relief and was becoming increasingly distressed with pain. At 10.30 am on 7 September 1979, continuous ultrasound treatment was given over the whole breast, for 10 minutes at 2.5 to 2.75 W/cm², using Aquasonic gel as a coupling agent. At 12.30 pm, 2 hours after treatment, the baby was again put to the affected breast and obtained 30 ml of milk (as measured by the usual procedure of weighing the baby immediately before and immediately after suckling). At subsequent feed times the baby was able to obtain normal amounts from both breasts.

On examination the next day, the breasts were both comfortable and soft after feeding. No further ultrasound was considered necessary. Mother and baby were discharged on the 7th day after delivery, with no further feeding problems.

Many cases need two treatments of ultrasound, given on successive days, but it is very rare to need more than two. The patient finds the treatment soothing, whereas continued attempts to express are very painful and usually frustratingly unproductive. This form of treatment allows the mother to continue to breast-feed, and so has a great advantage over medical suppression of lactation. No unpleasant side-effects have been noticed.

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Case 2

For the patient who is breast-feeding some weeks or months after delivery and who develops incipient breast abscess or cellulitis, the same treatment is effective in reducing the symptoms of rubor, tumor, calor and dolor.

Mrs M, aged 32, multipara, was admitted to hospital for induction on 18 September 1979. She progressed to an instrument delivery of a living male infant the following day. She enjoyed an uneventful recovery and was discharged with the baby on 26 September 1979. Four months later, on 29 January 1980, she developed a painful, red area near the areola of the left breast only. This condition worsened, and the following day she consulted her medical practitioner, who prescribed antibiotics and referred her to me for ultrasound treatment. By this time the baby was unable to feed from the left breast at all as it was too tight and hard to allow compression of the areola.

Continuous ultrasound was given at 4 pm on 30 January 1980, using Aquasonic gel as a coupling agent, for 6 minutes at 2.0 W/cm², concentrating on the painful area. (The ultrasound dose is reduced slightly when concentrating on a small area to reduce the risk of discomfort from thermal effects.) At 6 pm the baby was able to obtain a small feed (for a period of 5 minutes), and at the 6 am feed next morning the affected breast was offered first and a vigorous 10-minute feed was given. When the patient came for treatment the next day there were scattered, small pink patches and the breast was not very tender. The ultrasound treatment was repeated, again at 2.0 W/cm². At the third visit, on 1 February 1980, there was a very small, faintly pink area, not at all tender and not hard. As the baby was feeding normally, no further treatment was given.

This case history is typical of those who have presented in the lactating period with incipient breast abscess. With early referral, the patient need not interrupt the normal pattern of feeding from the affected breast.

Acknowledgements

I am indebted to the staff of the obstetric ward and neonatal nursery of the Bathurst District Hospital for their interest in this form of treatment. Most
referrals, in the first instance, came from the nursing staff, to which was added the concurrence of the medical practitioner concerned. The nursery staff cooperated, whenever necessary, by weighing babies before and after feeding at each breast, at each feed, over several days, even when they were hard-pressed by the volume of their normal workload.

I am also indebted to the Bathurst medical practitioners who referred patients after they had been discharged from hospital, and especially to the specialist obstetrician for his interest and encouragement.

Afterword

A recent library search conducted by Janette Heath, physiotherapist-in-charge at Crown Street Women's Hospital, Sydney, failed to reveal any relevant published material in this area.