Urut Melayu, the Traditional Malay Massage, as a Complementary Rehabilitative Care in Postpartum Stroke

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Abstract

Background: The case of a 32-year-old Malay woman who developed postpartum stroke is reported.

Methods: The patient received a series of *urut Melayu*, the traditional Malay massage, sessions at one of the newly established integrated hospitals in the country.

Results: After 14 *urut Melayu* sessions, she improved tremendously in her speech and fine motor skills and regained her activities of daily living.

Conclusions: This use of *urut Melayu* to complement rehabilitation care in patients poststroke is promising.

Introduction

SINCE 2007, SIX INTEGRATED HOSPITALS have been introduced in Malaysia whereby one of its objectives is to provide *urut Melayu* for poststroke patients. *Urut Melayu* is the traditional Malay massage, which involves soft-tissue manipulation of the whole body, sought for different types of conditions and ailments. It is partly spiritual in nature, with the practitioner exclusively using their hands and fingers.¹ Better outcomes are associated with early initiation of *urut Melayu*.² Studies have shown that massage may be superior to acupuncture.³

A case is reported of a patient who had a postpartum stroke and who experienced positive outcomes following *urut Melayu* at one of the integrated hospitals.

The patient had signed a consent form for the publication of this case study and the use of her photographs. The final manuscript was also sent to her to confirm the accuracy of the report.

Case Report

A healthy 32-year-old primigravida with an unremarkable prenatal course was admitted to a private hospital following contraction pain. Due to fetal distress, she underwent an emergency lower segment cesarean section. After delivery, she developed a postpartum hemorrhage attributed to uterine atony resulting in an emergency subtotal hysterectomy. She was ventilated and managed by the Obstetrics &

Gynaecology and Anaesthetics Team. Her subsequent recovery was complicated by hypoxia ischemic encephalopathy, resulting in a dense stroke to the right side of her body (Fig. 1).

She had regular physiotherapy and speech therapy. On postpartum day 48, she was well enough for discharge with a tracheotomy *in situ*, although she still had significant slurring of speech, needing help with her Activities of Daily Living (ADL) and only able to mobilize with a wheelchair. Treatment at the Traditional and Complementary Medicine (T&CM) Unit of one of the integrated hospitals was then suggested to her.

At the T&CM unit, she was screened for suitability to undergo T&CM modalities and was offered either *urut Melayu* or acupuncture. The patient and her husband chose *urut Melayu* and the first session of cycle 1 was started on the same day. At this point, the patient was not receiving any medical drug or treatment. Her complete case progression is presented in Table 1.

On November 10, 2008, 3 months after her first session, the patient received her final *urut Melayu* session. She came with her husband and daughter and walked aided by her walking frame from the parking lot to the T&CM unit (about 50 m). She could sit on her own, holding her daughter. She could stand unsupported for 1 or 2 minutes. Her speech had remarkably improved and was almost normal apart from some slight stuttering. She was able to lie on the *urut Melayu* couch with minimal aid and could sit up from a lying

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FIG. 1. Patient unconscious in the intensive care unit (June 27, 2008).

position by herself. She excitedly reported that she could do all her five ADL unaided. Her sleep and appetite had remarkably improved, which showed in her weight gain and positive mood. Her handwriting was also more legible although, albeit done slowly. Her positive improvements had boosted her self-esteem and she hoped to be able to work again in the near future. (see Fig. 2 for improvements in her right hand.)

Six (6) months after the stroke (Fig. 3), she had progressed from doing her daily activities on a wheelchair to walking about with the support of the walker. She had resumed her job as an educational technologist/instructional designer in a local private open university. Some of her fine motor skills had returned so that she could now type on the computer and carry out her routine chores. Her words were articulated better and expressed with more variation in tone. She appeared happier and had come a long way from the onset of her postpartum stroke. She continued to seek *urut Melayu* from the same T&CM unit off and on.

TABLE 1. CASE PROGRESSION OF POSTPARTUM STROKE PATIENT WHO WAS GIVEN *URUT MELAYU*

Date	Patient management	Observation
June 26, 2008	Admitted to hospital Emergency lower-segment cesarean section Subtotal hysterectomy Abdominal packing Ventilated	Postpartum hemorrhage attributed to uterine atony
June 27, 2008	Repeated laparotomy to remove abdominal packing Tracheostomy <i>in situ</i>	Dense stroke to the right side of body due to hypoxia ischemic encephalopathy
August 13, 2008	Discharged from hospital	Tracheostomy <i>in situ</i> Still having significant slurring of speech Able to tolerate normal feeds Needing help with ADL Only mobilizing with wheelchair
August 14, 2008	Screened for suitability for T&CM modalities Started <i>urut Melayu</i> treatment, concentrating on right leg and then slowly moving up to the right upper limb This first session lasted for 45 minutes Counseling by the practitioner throughout the session	Mild right facial asymmetry with prominent right-sided hemiparesis Unable to lift the right side of her limb On tracheostomy <i>in situ</i> Significant slurring of speech Needed help to get up from wheelchair Intense pain during mobilization Crying and full of self-pity Reported limited self-care activities Dependent for ADL (i.e., bathing, washing hair, dressing, eating, and toilet activities) Reported frequent awakening at night probably due to restless leg syndrome
August 20, 2008	Given second session of Cycle 1 <i>urut Melayu</i>	Able to fist up her right hand Reported to feel <i>ringan</i> (light, relieved, relaxed)
August 22, 2008	Given third session of Cycle 1 <i>urut Melayu</i> Right upper and lower limbs and back massaged	Patient could lift her body from wheelchair with aid Managed to smile Reported muscles less stiff after first two sessions Could sit independently with some support but reported to still need help with ADL Confidence of recovery restored
August 25, 2008	Given fourth session of Cycle 1 <i>urut Melayu</i> <i>Urut Melayu</i> administered to right upper and lower limbs and back	Patient could lift her right hand to 90° and lift right leg to 45 degrees (Fig. 2) Could sit without support but needed help to sit from supine position Able to ambulate with a walking frame Speech was clearer with residual slurring Able to remember things better, especially days and date

(continued)

TABLE 1. (CONTINUED)

<i>Date</i>	<i>Patient management</i>	<i>Observation</i>
September 2, 2008	Given fifth session of Cycle 1 <i>urut Melayu</i> Practitioner focused <i>urut Melayu</i> on the waist area, right limbs, and back	Patients could lift her right hand to 120° Able to hold light objects such as cup, plate, or fork Could sit without support Able to stand up from sitting position with aid Reported much-reduced pain compared to first session Able to sit unsupported from supine position although still needed support to stand Could walk as far as 2 m on her own with walking frame Could climb up stairs at least 5–8 steps Reported sleep at night without any interruption Reported improved appetite Reported to be able to pass urine and defecate better Reported to be able to do her own toilet activities (bathe and wash hair) but still needed help with dressing as still not able to fully flex her right hand
September 8, 2008	Given sixth session of Cycle 1 <i>urut Melayu</i>	
September 16, 2008	Given first session of Cycle 2 <i>urut Melayu</i> <i>Urut Melayu</i> focused on both of her legs to facilitate blood flow	Improved mobility Reported to have continued uninterrupted sleep Appeared to be in a happier mood and better physical condition
September 29, 2008	Given sixth session of Cycle 2 <i>urut Melayu</i> <i>Urut Melayu</i> conducted aimed at body wellness and muscle relaxation	Could walk much further with the help of walking frame Body weight increased from initial 34 kg to 45 kg Could tolerate normal breathing with tracheostomy occluded Reported to be able to do dishes and light cooking while sitting Reported to bathe and perform toilet activities on her own
October 9, 2008	Given eighth session of Cycle 2 <i>urut Melayu</i> <i>Urut Melayu</i> concentrated on right leg and hand to enhance her walking ability	Walked much better with walking frame Able to sit for longer time
November 10, 2008	Given 12th session of Cycle 2 <i>urut Melayu</i> (final session)	Walked aided by walking frame from the car parking lot to T&CM Unit (about 50 m) Could sit on her own, holding her daughter Able to stand unsupported for 1–2 minutes Speech was much more improved and almost normal, with some slight stuttering Able to lie on the <i>urut Melayu</i> couch with minimal aid and could sit up from lying position by herself Reported to do all ADL unaided Improved sleep and appetite had resulted in weight gain and positive mood Handwriting was more legible albeit done slowly Increased self-esteem Looked forward to resuming work

T&CM, Traditional and Complementary Medicine; ADL, activities of daily living.

Her husband, who had earlier given up his job to take care of her, had also resumed his post as an Assistant Engineer.

Discussion

This case study exhibited the potential of *urut Melayu* as a complementary rehabilitative care for poststroke. In Malaysia, *urut Melayu* has been sought for many years for

postpartum care, sprains, aches and pains, as well as bone-setting. Based on feedback from several local *urut Melayu* practitioners, it is thought that the shorter the duration between stroke onset and *urut Melayu* initiation, the higher is the likelihood of positive outcome. An earlier study reported better outcomes associated with early initiation of treatment² as well as repeating *urut Melayu* at regular intervals. However, this patient, like other similar patients in the integrated government hospitals, can only be referred

FIG. 2. On the fourth session of *urut Melayu*, the patient could lift up her right hand to 90° (August 25, 2008).

for *urut Melayu* once discharged. This explained the delay in receiving *urut Melayu* by this patient.

The patient also received whole body massage regardless of the part or side of the body that was affected by the stroke, since all diseases are interconnected and pain or disorder in one part of the body may have its source in another part. This holistic approach to pain and disease is common throughout all practices of T&CM.⁴ The use of *Serai Wangi*

(*Cymbopogon nardus* [L.] *rendle*) in *urut Melayu* helps to reduce friction and has a relaxing effect.⁵ However, more focus was given to the affected upper and lower limbs. The intensity of the *urut Melayu* also depended on the patient's pain threshold.

Massage therapy had been reported to be an integral part of a growing number of people's holistic health regimens.⁶ According to Cherkin et al., massage is superior to self-care and acupuncture for lower back pain.³

Goats reported that massage can increase blood and lymph circulation, bringing stagnant blood back to the heart and allowing fresh oxygen and nutrients to be delivered to the tissues.⁷ It also increases the lymph circulation, allowing this system to efficiently remove metabolic wastes and toxins from the tissue. Additionally, massage can increase local circulation to problem areas, allowing for faster healing time, reduced tension, and increased functionality of the tissue and increased range of motion at the joint. This could perhaps explain how the patient's physical mobility had improved. The positive outcome of *urut Melayu* in improving the patient's mood is supported by Shulman and Jones' study,⁸ which reported the effectiveness of massage to reduce anxiety.

Nevertheless, there is much need for future studies on *urut Melayu*. At the very least, this study should be followed by a case series. There is always the problem of interpretation that goes with a single report, because one may wonder if the *urut Melayu* actually had specific healing effects, especially as improvements came so rapidly after initiation of massage. Specific measures to indicate improved blood flow, lymph flow, color, pulse, sensation, and mood would be invaluable.

Conclusions

This study found *urut Melayu* to be a promising complementary rehabilitative method in postpartum stroke. Further research is warranted to add to the current dearth of knowledge on this subject.

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Disclosure Statement

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FIG. 3. (Left to right) Patient, *urut Melayu* practitioner, nurse, and author FF.

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