S.C.C. No. 34362

IN THE SUPREME COURT OF CANADA
(ON APPEAL FROM THE COURT OF APPEAL FOR ONTARIO)

B E T W E E N :

DR. BRIAN CUTHBERTSON and DR. GORDON RUBENFELD

Appellants

- and -

HASSAN RASOULI BY HIS LITIGATION GUARDIAN AND SUBSTITUTE DECISION MAKER, PARICHEHR SALASEL

Respondents

- and -

THE CONSENT AND CAPACITY BOARD

Intervener

AFFIDAVIT OF DR. BRIAN CUTHBERTSON
(DR. BRIAN CUTHBERTSON AND DR. GORDON RUBENFELD, APPELLANTS)
(Pursuant to Section 62(3) of the *Supreme Court Act* and Rules 47, 92.1 of the *Rules of the Supreme Court of Canada*)

I, Brian Cuthbertson, of the City of Toronto, MAKE OATH AND SAY:

1. I am a medical doctor, a specialist in critical care medicine, and Chief of the Department of Critical Care Medicine at Sunnybrook Health Sciences Centre ("Sunnybrook"). I was responsible for Hassan Rasouli's care between November 15, 2010 and November 22, 2010, and on several other occasions since then. I am aware of his current condition. I am one of the appellants herein. I have knowledge of the matters to which I hereinafter depose.

2. Hassan Rasouli ("Mr. Rasouli") is a 60 year old patient currently admitted to the Critical Care Unit (the "CrCU") at Sunnybrook. He has been completely dependent on others for his personal care since mid-October, 2010 after sustaining a brain infection following surgery to remove a brain tumour.

3. Mr. Rasouli is unable to make decisions regarding his own medical treatment. His wife and litigation guardian, Ms. Salasel Parichehr, is presently making these decisions on his behalf.

4. The infection damaged Mr. Rasouli's brain stem with the result that he is unable to breathe reliably without the assistance of a mechanical ventilator which has been connected to a tube that has been surgically inserted into his trachea.

5. In addition to mechanical ventilation, Mr. Rasouli is also receiving the following essential medical interventions:

(a) He receives artificial nutrition and hydration which is delivered via a tube that has been surgically inserted into his stomach.

(b) He must be bathed in bed and turned periodically to prevent the development of bed sores.

(c) A catheter has been inserted into his bladder to drain urine because he is incontinent.

(d) He receives vasopressor medications to allow him to maintain adequate blood pressure.

6. As a result of these and other interventions and because Mr. Rasouli is confined to a hospital bed, he has suffered from life threatening infections on several occasions. He also experienced a spontaneous bleed behind the membrane that lines his abdominal cavity.

7. When this matter was first brought before the Ontario Superior Court of Justice in February of 2011, Mr. Rasouli was diagnosed as in a persistent vegetative state (PVS). Given that diagnosis, the appellants (myself and Dr. Rubenfeld) as well as Mr. Rasouli's other treating physicians were of the view that the treatments being providing to Mr. Rasouli were not medically indicated. However, pending final determination of this question by the courts below we agreed to continue those treatments. We remain willing to and intend to continue those treatments pending determination of the issues raised on this appeal by this Court and pending a further hearing by the Ontario Superior Court of Justice which the appellants have requested as part of the relief on this appeal.

8. In late January of this year neurological assessments by two neurologists, Drs. Lim and Swartz resulted in a change to Mr. Rasouli's diagnosis from PVS to minimally conscious state ("MCS"). This change in diagnosis was made as a result of negligible but nonetheless detectable changes in Mr. Rasouli's responsiveness, described more thoroughly in the reports of the neurologists. A copy of the assessments of Drs. Lim and Swartz are attached hereto and marked as Exhibits "**A**" and "**B**". Other aspects of Mr. Rasouli's condition that negatively impact on his long term prognosis, including spastic quadriplegia (profound permanent weakness of all limbs due to his brain stem strokes) and his chronic critical illness, have not changed.

9. As a result of this change in diagnosis, the Appellants (and Mr. Rasouli's other treating physicians) are of the view that further investigations are required to determine whether or not

Mr. Rasouli may be capable of communication. These investigations are being pursued currently and are expected to take approximately two to three months to complete. Given that Mr. Rasouli's treatment team had already decided to continue all requested care for Mr. Rasouli pending the outcome of this appeal, the current treatment plan has not changed as a result of the change in Mr. Rasouli's diagnosis from PVS to MCS other than to pursue the possibility of communication abilities.

10. If Mr. Rasouli is not capable of communication, the Appellants and Mr. Rasouli's other treating physicians remain of the view that the standard of care does not require continuation of mechanical ventilation given his condition including MCS, spastic quadriplegia, chronic critical illness, all of which are extremely unlikely to improve over the long term.

SWORN BEFORE ME at the City of Toronto, on March , 2012.

_____
Commissioner for Taking Affidavits

_____
Brian Cuthbertson

Transcribed Report

Patient: RASOULI, HASSAN **Age:** 60 y **Sex:** Male **TSRCC#:** **MRN:**2696921

Account #:	1702310A	**Date of dictation :**	1/23/2012 1:37:00PM
Activity Date:	2012-Jan-23	**Date of transcription :**	2012/01/23 1:47:00PM
Status:	CORRECTED NOT READ	**Last Update :**	1/23/2012 8:29:41PM

Consultation Note

This is Exhibit A referred to in the affidavit of Brian Cuthbertson sworn before me, this day of March 20 12

A COMMISSIONER FOR TAKING AFFIDAVITS

PT NAME: RASOULI, HASSAN
HFN: 2696921
ACCT#: 1702310A
DOB: 02/16/1951
SERVICE DATE: 01/23/2012

Thank you very much for requesting a consultation on the patient Hassan Rasouli who is a 60-year-old gentleman with persistent alteration in consciousness. I saw him on behalf of neurology consultation service on January 23, 2012 in the cardiac critical care unit.

This gentleman's current illness is well described in the paper chart, and I will review it only briefly here. This gentleman was first admitted on October 16, 2010 for resection of a right cerebellar pontine angle tumor which histopathologically was a meningioma. His postoperative course was complicated by a number of issues including ventriculitis/meningitis, right transverse/sigmoid sinus thrombosis, and multifocal infarction including infarction in the left mid brain, splenium, right caudate, and mesial cerebellum. He has had a persistently diminished level of consciousness/alert awareness since his operation. He is currently ventilated through a tracheostomy.

I examined the patient in the cardiac critical care unit on January 23, 2012 between 1145h and 1315h. In addition to a routine neurological examination, he was assessed with the JFK Coma Recovery Scale - Revised (Giacino et al, Arch Phys Med Rehabil, 2004; ARCM working group, Arch Phys Med Rehab 2010; Monti et al, BMJ, 2010).

He had an overall CRS-R 7/23. With regards to his spontaneous behavior, when I examined, he had spontaneous and sustained eye opening, and occasional horizontal movements of the eyes, with prominent left beating nystagmus on leftward gaze. The eyes were dysconjugate, with prominent exotropia which was particularly pronounced on leftward gaze. There were few horizontal movements of the right ere, but there were spontaneous vertical movements. The only horizontal movement of the right eyes spontaneously appreciated was left beating nystagmus on attempted left gaze. The left eye, could not be adducted past the midline. However, the left eye did move to the left, which was accompanied by left beating nystagmus. Vertical movements of the left eye appeared normal. Corneal reflex was present. Both the afferent and efferent limbs were present on the right. The right pupil 3 mm and unreactive. The left pupil 2 mm and sluggishly reactive.

On assessment of auditory function, the patient did not manifest any consistent object-related eye or limb movements to command. He did not localize to auditory stimulus presented either on the left or the right side. He did not show auditory startle. His CRS-R auditory score was 0.

On assessment of visual function, he did not exhibit evidence of object recognition when presented with a pen, flashlight, or a cup. He did not display object localization to reaching. However, there was a consistent evidence of visual pursuit, which was elicited with a mirror placed 4 to 6 inches

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Consultation Note

in front of the patient's face, and oscillated 45' to the left or right or 45' above and below the horizontal. Moreover, the patient was able to display consistent fixation with the left eye to a cup so long as the cup was placed in the left hemifield The patient responded inconsistently to visual startle. The overall CRS-R visual function score was three.

When motor function was assessed, the patient's spontaneous motor posture as extension in both upper extremities, and flexion in both lower extremities. He did not display functional object use. He was not able to demonstrate an automatic motor response with either limb or oromotor movements. He was not able to display consistent object manipulation. A cup placed on the dorsum of the hand to did not result in appropriate use. A cup placed on the palmar surface of his right hand elicited reflex grasp. This patient did not exhibit the ability to localize to noxious stimuli with the limbs. He did, however, display extension posturing with the upper extremities in response to noxious stimuli. His CRS-R motor function score was 1.

On assessment of oromotor/verbal function, there was no intelligible verbalization. Moreover, there were no consistent nonreflexive oral movements or spontaneous vocalizations. There were some oral reflexive movements when a sponge stick was placed in the mouth. Overall, he had a CRS-R oromotor/verbal function score of 1.

When communication was assessed, he did not display any functional accurate communication. Moreover, there was no consistent nonfunctional but intentional communication. He had an overall CRS-R communication score of 0.

With regards to his level of arousal. He was not able to display consistent behavioural responses following verbal or gestural prompts. However, he had persistent eye opening throughout the examination without the need for repetitive stimuli. His overall CRS-R arousal score was 2.

This patient's most recent structural brain imaging was performed on June 10, 2011. This was significant for a persistent subdural collection in the right CPA angle suspicious for empyema. He had improving but persistent leptomeningeal and ependymal enhancement. There was encephalomalacia in the right brain stem, brachium pontis, and right cerebellar hemisphere. There was partial occlusion of the right transverse sinus.

This patient's last EEG was performed on December 9, 2010. This was remarkable for diffuse slowing in the theta range.

Impression.

With regard to the primary question of the patient's current state of awareness, he is current physical examination is most in keeping with a minimally conscious state, and he meets Aspen Workgroup Criteria for the diagnosis of a minimally conscious state as manifested by the presence of visual pursuit elicited with an oscillating mirror, and also visual fixation to a cup.

Transcribed Report

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With regards to his other findings, in addition to the above, I suspect that he has bilateral internuclear ophthalmoplegia, as well as a right-sided VI nerve palsy. He also appears to have defect of both the efferent and afferent limbs of the right corneal reflex, suggesting lesions of cranial nerves V and VII on the right.

Yours sincerely,

Andrew Lim, MD, FRCPC DABPN
Division of Neurology

cc:

/al
dd: 01/23/2012 dt: 01/23/2012 13:47:14 JobID: 2684498 / 2425847

Sunnybrook
HEALTH SCIENCES CENTRE

C3 269 69 2
RASOULI, HASSAN
19SIFEB16 M HC 5796821186
17023-10A CV 1000
66 OTONABEE AVENUE
RONTO M2M2S6 416-900-
PATIENT IDENTIFICATION GM

PROGRESS NOTES

DATE YYYY/MM/DD	NOTES TO BE SIGNED BY PHYSICIAN
Jan 28/12 21:45 - 22:45	Neurology Staff. Called by Dr. Cuthbertson to RIA Mr. Rasouli late this week. Was not available until now & will be away for next week Pt well known to me but not seen since Feb 10, 2011. See my notes from Oct 17 2010, Nov 16, 2010, Nov 30/10 Jan 7 2011 + Feb 10, 2011. for history + progress. Over prior assessments, inconsistent evidence of tracking + blink to threat were identified but never seen consistently, thus I wrote his condition met criteria for PVS; "at best would be minimally conscious state" + that his prognosis for recovery to independence was extremely poor. errors Over ~~the~~ almost 1 year since last assessment, Mr. Rasouli is still ventilator dependent + bed bound. However his exam today has clearly changed. I did not repeat the full neurological / coma exam well documented by Dr. Lim recently, but rather focussed on repeating the CRS-R + identifying features of change on exam. Mr. Rasouli has diffuse + severe limitations of voluntary + reflexive movements of his limbs

This is Exhibit B referred to in the affidavit of Brian Cuthbertson sworn before me, this 8 day of March 20 12

A COMMISSIONER FOR TAKING AFFIDAVITS

Sunnybrook
HEALTH SCIENCES CENTRE

PROGRESS NOTES

C3 269 69.21
RASOULI, HASSAN
1951FEB16 M HC 5796821188 WX
17023-10A CV 100C107
66 OTONABEE AVENUE
TORONTO M2M2S6 416-900-2770
PATIENT IDENTIFICATION SCATES, DAMON GH

DATE YYYY/MM/DD	NOTES TO BE SIGNED BY PHYSICIAN

The range of behavioural responses he can exhibit. However he clearly + consistently was able to close a thumb up with (R) hand, occasionally (L) he was able to grasp ~~grasp~~ but inhibit the grasp reflex with his (L) hand but to squeeze on request + Release on request. Note all visual prompts had to be provided in the (L) hemifield of his (L) eye.

He was able to inconsistently but intermittently move his eyes to different targets on verbal command + to close his eyes + open again to request.

On formal testing, he scores a 2 on the Auditory function scale (localizes to sound) but got 2/4 trials correct → a 3/4 is considered reproducible.

He scored a 3 on Visual function scale (pursuit) to path an object (photo) + mirror pursuit without loss of direction c the Left eye only (the (R) eye does not move) + his range was 45° R/L and vertically; this was reproduced on 2 trials

He is unable to hold objects beyond grasp + has limited mvmt so the motor function scale use is limited but he scores a zero. He was consistently able to show a "thumbs up" to verbal +/- visual request with his wife translating to Farsi.

over →

Sunnybrook
HEALTH SCIENCES CENTRE

PROGRESS NOTES

C3 269 64 21
RASOULI, HASSAN
1951FEB16 M HC 5796821188 WX
17023-10A CV 100CT07
66 OTONABEE AVENUE
TORONTO M2M2S6 416-900-2770
SCALES, DAMON GM
PATIENT IDENTIFICATION

DATE YYYY/MM/DD	NOTES TO BE SIGNED BY PHYSICIAN

He scores 1 for oromotor (reflexive movements)
He was able to stick his tongue out to his wife's request but only after she helped open his mouth slightly.

He scores zero on communication scale.

He scores 2 on arousal (eyes open spontaneously)

Thus today he scores an 8 on the JFK CRS-R.

Importantly, he has consistently shown visual pursuit one of the earliest signs of MCS.

He thus now formally meets criteria for MCS. He may have more comprehension than he can show given his extensive brainstem injury: he may be partially locked-in + has a limited repertoire of behaviours he can voluntarily control.

The wife demonstrated other behaviours like grasping his phone but these are inconsistent + could be voluntary but are very likely reflexive movements. The one undeniable index of change is consistent fixation, consistent tracking/pursuit + consistent eye then head blink to threat.

R Swartz