



FSCO A10-003245

BETWEEN:

MANOS HODGES

Applicant

and

**SECURITY NATIONAL INSURANCE CO./
MONNEX INSURANCE MGMT. INC.**

Insurer

DECISION ON A PRELIMINARY ISSUE

Before: William J. Renahan

Heard: April 2, 3 and 5, 2012, at the offices of the Financial Services
Commission of Ontario in Toronto

Appearances: Tammy Ring for Mr. Hodges
Linda Matthews for Security National Insurance Co./
Monnex Insurance Mgmt. Inc.

Issues:

The Applicant, Manos Hodges, was injured in a motor vehicle accident on August 5, 2009. He applied for and received statutory accident benefits from Security National Insurance Co./ Monnex Insurance Mgmt. Inc. payable under the *Schedule*.¹ Security National paid certain benefits to Mr. Hodges.

¹The Statutory Accident Benefits Schedule — Accidents on or after November 1, 1996, Ontario Regulation 403/96, as amended.

Under the *Schedule* a person is eligible to apply for enhanced benefits if they suffer a “catastrophic impairment” within the meaning of the *Schedule*. Mr. Hodges claims that he suffered a catastrophic impairment within the meaning of section 2(1.2)(e)(i) as follows:

- (e) subject to subsection (1.4), brain impairment that, in respect of an accident, results in,
 - (i) a score of 9 or less on the Glasgow Coma Scale, as published in Jennett, B. and Teasdale, G., *Management of Head Injuries*, Contemporary Neurology Series, Volume 20, F.A. Davis Company, Philadelphia, 1981, according to a test administered within a reasonable period of time after the accident by a person trained for that purpose,

Security National argued that Mr. Hodges does not satisfy the definition under section 2(1.2)(e)(i). The parties were unable to resolve their disputes through mediation, and Mr. Hodges applied for arbitration at the Financial Services Commission of Ontario under the *Insurance Act*, R.S.O. 1990, c.I.8, as amended.

The preliminary issue is:

1. Did Mr. Hodges suffer a catastrophic impairment within the meaning of section 2(1.2)(e)(i) of the *Schedule*?

Result:

1. Mr. Hodges suffered a catastrophic impairment within the meaning of section 2(1.2)(e)(i) of the *Schedule*.

THE GLASCOW COMA SCALE:

In *Tournay and Dominion of Canada General Insurance Co.* (FSCO A05-000507 July 20, 2006) Arbitrator Kominar described the development of the Glasgow Coma Scale.

The Glasgow Coma Scale was developed by Dr. Graham Teasdale and Dr. Bryan Jennett and first published in 1974 in *The Lancet* [Graham Teasdale and Bryan Jennett, "Assessment of Coma and Impaired Consciousness," *The Lancet*, July 13, 1974, pp. 81-83] as an intersubjectively reliable, yet simple to use, clinical tool for the assessment of the "the depth and duration of impaired consciousness and coma" in patients. Jennett's and Teasdale's original article describing the GCS scale did not include the assignment of numerical scores to the levels of behavioral response which the test measures. This feature of the GCS was added in a subsequent text published in 1981, *The Management of Head Injuries*, and it is this text which is specifically referenced in the *Schedule's* definition of catastrophic impairment. The primary purpose of adding numerical scoring, according to Dr. Jennett, is to "facilitate communication between doctors." However the GCS has also developed into a method for correlating levels of consciousness with ultimate patient outcomes. It is this correlation with patient outcomes that likely explains why the *Schedule* sets the threshold for catastrophic impairment at "9 or less." Dr. Jennett states:

Beyond the field of care of [head injured] patients the GCS has been used to classify head injured patients in epidemiological studies worldwide. Three grades of severity are recognized, severe (GCS 8 or less), moderate (GCS 9-12), and mild (GCS 13-15). These show, for example, that only 5% of admitted head injuries are severe in developed countries, while over 80% are mild. This has resulted in increasing interest in mild injuries because they are so frequent and because a substantial number of them develop complications resulting in death or disability. It is therefore important to consider the different prognostic features of patients assessed as GCS, 13,14, and 15 ... It is important not to assume that because a patient is classified as only mildly injured he has not suffered any brain damage. [See Bryan Jennett, "Development of Glasgow Coma and Outcome Scales" 2 *Nepal Journal of Neuroscience* (2005) pp 24-28, at p. 25.]

The GCS score is an additive function of independent observations made of a patient's graded responses within three behavioral domains: eye movement, motor response and verbal response. It is numerically scored according to the following criteria:

Eye Opening

4. Spontaneous, indicates arousal, not necessarily awareness
3. To speech. When spoken to- not necessarily the command to open eyes
2. To pain. Applied to limbs, not face where grimacing can cause closure.
1. None

Motor Response

6. Obeys commands. Exclude grasp reflex or postural adjustments
5. Localizes. Other limb moves to site of nail-bed pressure
4. Withdraws. Normal flexion of elbow or knee to local painful stimulus
3. Abnormal flexion. Slow withdrawal with pronation of wrist, adduction of shoulder (decorticate posture)
2. Extensor response. Extension of elbow with pronation and adduction. (decerebrate)
1. No movement

Verbal Response

5. Orientated. Knows who, where, when; year, season, month
4. Confused conversation. Attends & responds but answers muddled/wrong.
3. Inappropriate words. Intelligible words but mostly expletives or random.
2. Incomprehensible speech. Moans and groans only - no words.
1. None

The maximum score one can be assigned is 15/15 and obviously the lowest is 3/15. Although the GCS was originally devised as a research tool, it soon became routinely accepted in clinical medical practice as a simple and reliable way of recording changes in a patient's level of consciousness. As noted above, it also is claimed by many to correlate well with patient outcomes following incidents of brain injury.

In order to be classified as catastrophically impaired under the relevant section of the *Schedule*, one needs to score "9 or less" on a test administered by a qualified person within a reasonable period of time after the accident.

In the 1981 article, Drs. Jennett and Teasdale go into further detail as to how to measure the various responses, particularly the Motor Response.

EVIDENCE:

The evidence on whether Mr. Hodge's GCS readings satisfied the test consisted of his medical records, with focus on the period August 5 to August 10, 2009, and the testimony of Dr. Harold Becker, a family doctor with expertise in catastrophic assessments and Dr. Henry Berry, a neurologist, whose practice now concentrates on record research and the correlation of patient

outcomes with specialists' opinions. Dr. Becker testified for the Applicant and Dr. Berry testified for the Insurer.

Mr. Hodges was 27 years old when the mini-motorcycle he was riding collided with a van near Goderich. He suffered several injuries including significant injuries to his diaphragm, liver and legs. Subsequent CT scans and an MRI identified a subdural hematoma and a subarachnoid hemorrhage.

I accept the opinion of both doctors that Mr. Hodges suffered a brain impairment as a result of the accident. The parties did not argue that the people who administered the GCS tests after the accident were not trained for that purpose and I find that the paramedics, nurses and a trainee doctor who administered the test were trained for that purpose.

The narrow issue is whether Mr. Hodges' brain impairment resulted in a GCS score of 9 or less according to a test administered within a reasonable period of time after the accident.

The accident occurred at about 10:50 p.m. on the night of August 5, 2009. Ambulance attendants arrived and took Glasgow Coma Scale readings at 11:06, 11:12 and 11:18 p.m. They were all 11 out of 15.

The attendants took Mr. Hodges to the local hospital in Goderich where air ambulance paramedics prepared him for transfer to the London Health Sciences Centre. Mr. Hodges was combative and flailing due to chest injuries, a torn diaphragm, lacerated liver and leg fractures. In order to control his body and his breathing, the paramedics sedated Mr. Hodges and inserted a tube into his throat and trachea ("intubation") to assist and control breathing. Mr. Hodges arrived at the London hospital at 1:20 in the morning of August 6, 2009 where the Trauma Team doctor recorded "He had a GCS of 3 because he had been intubated and paralyzed at the referring site."

In the Emergency Department Flowsheet the word "intubated" appears where a nurse would normally record the GCS scores.

Mr. Hodges underwent surgery on August 6 from 4:30 a.m. to 1:45 p.m.

At 2:15 p.m. on August 6 he was transferred to the Critical Care Trauma Centre. His GCS was taken hourly and is either T3 or 3 all day. The use of "T" in connection with a GCS score is described in three places. In a London Health Sciences Centre manual "Scores for verbal and motor response should reflect the best possible level of function. If the patient has an ETT or tracheostomy tube impairing the verbal assessment, a "T" can be used to indicate that the patient could be better than the score indicates." In the Emergency Department Trauma Flowsheet under the GCS grid for recording scores "T=Endotracheal Tube OR Tracheostomy." In the Critical Care Trauma Centre Flowsheet "T=Verbal response could be better." During this period in the Critical Care Trauma Centre Mr. Hodges was administered Fentanyl, a potent narcotic analgesic used as an adjunct to general anesthetics, and Propofol, an anesthetic agent. As well, he remained intubated.

At 2:00 p.m. on August 7, the Propofol infusion was stopped and at 3:00 p.m. the Fentanyl infusion was stopped, although he remained on these two drugs "as needed." At 4:30 p.m. the tube was removed from his trachea and his GCS was 10. He was checked hourly and his GCS remained at 10 for the rest of the day.

At 7:00 and 8:00 a.m. on August 8 his GCS is T9. The "T" designation was the result of a T1 score under verbal.

At 1:00 a.m. on August 9, a nurse recorded a GCS of 10. At 2:00, 3:00 and 4:00 a.m., the same nurse recorded GCS scores of 9. She reduced the "best Motor Response" from a 6 to a 5. This is the first time after extubation that Mr. Hodges' GCS dropped to 9 without a "T" designation. At 5:00 a.m. on August 9, Mr. Hodges' GCS was 10 and remained at this level or above until GCS records stop on August 18 when his GCS was 15.

ANALYSIS:

In *Tournay*, Arbitrator Kominar found that Ms. Tournay had valid GCS scores of 9 or less while she was intubated and satisfied the definition of “catastrophic impairment.” In one of those readings she had a score of 3 for eye opening, 1 for motor response and 1 for verbal response. She was intubated and could not respond verbally. Even if she received the full verbal score of 5, she would still have had a GCS of 9 and would have satisfied the test. I do not take this case as authority for the proposition that a GCS of 3 while a patient is intubated and medically paralyzed satisfies the GCS part of the definition of catastrophic impairment.

In their two articles, Drs. Teasdale and Jennett refer to several instances where one of the three domains of the GCS score cannot be tested. For example, eye movement may be untestable due to eyelid swelling or bilateral third-nerve lesions making eye opening impossible. Verbal response may be untestable because of the presence of an endotracheal tube. Or young patients or patients who have only a foreign tongue may not respond verbally. Motor response may be limited where limbs are immobilized by splints for fractures. However, Drs. Teasdale and Jennett find the GCS score is still helpful even though one of the domains cannot be tested because responsiveness can still be assessed even when some information is missing. This is particularly evident when assessing whether a patient’s level of consciousness is improving or deteriorating. However, the authors do not address the situation where a patient is untestable in all three domains and all the information on responsiveness is missing. In my opinion, if a patient is untestable in all three domains of the Glasgow Coma Scale, the GCS score is untestable. So a notional score of 3 where the patient is untestable means that the score is untestable. In Mr. Hodges’ case, where he had a GCS score of 3 while he was intubated and medically paralyzed, his GCS score of 3 meant that his GCS score was untestable. A score which means that the level of consciousness is untestable cannot satisfy the test for catastrophic impairment.

At 2:00, 3:00 and 4:00 a.m. of August 9, a nurse scored Mr. Hodges with a GCS of 9. During this period he was on sedatives and pain killers that had the side effect of reducing his level of consciousness.

Dr. Berry testified that these drugs, as well as Mr. Hodges' blood gases, blood pressure, respiratory rate, state of recovery and other factors could contribute to a lower GCS. I heard no evidence that these factors were unusual. I heard some evidence as to the half lives of some of the drugs Mr. Hodges took. However, except for the GCS scores of 3, I heard no reliable evidence of how much consciousness lowering medicine was in his body at the time the GCS 9 scores were taken and how that medicine would affect his score. Further, both Dr. Berry and Dr. Becker testified that studies have shown that different medical practitioners can score the same patient within a range of two. They both used the example of different people scoring the same patient with a GCS of 8, 9 and 10.

In *Liu v. 1226071 Ontario Inc., operating as Canadian Zhorong Trading Ltd.*, (2009) 97 O.R. (3d) 95, the Ontario Court of Appeal considered the same definition of "catastrophic impairment" in the context of a tort action and a claim for damages for health care expenses. The Court held that the test was a legal test and not a medical test and that the claimant's level of function and whether the head injury is described as "moderate to severe" is irrelevant to the test.

Any notion of catastrophic injury, other than the specific meaning ascribed to that term by the legislation, must be discarded when considering whether a claimant meets the statutory test. The statutory scheme creates a bright line rule which is relatively easy to apply. This enhances the ability of those looking to the definition to know what injuries will and will not be considered catastrophic. Having the same definition for both no-fault and third-party liability claims avoids inconsistency. The ease with which the rule can be applied adds an element of predictability which will facilitate the settlement of claims.

I find that the GCS test is not a scientifically precise measurement of level of consciousness. Therefore, I am not required by the legislation to undertake a scientific analysis of what Mr. Hodges' GCS score might have been had there not been complicating factors. Nor am I required to question the validity of the score because of the usual complicating factors which might affect the GCS score of a patient like Mr. Hodges. A GCS score of 9 or less is relatively easy to determine.

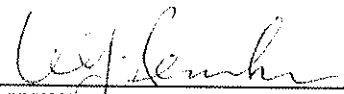
I therefore accept the GCS readings of 9 as satisfying that part of the test.

The only remaining issue is whether the test was administered within a reasonable period of time after the accident. The Insurer argued that GCS scores taken on the fourth day after the accident have limited prognostic value as other more accurate tools such as CT or MRI scans are available to determine brain impairment.

The decision to take GCS scores is a medical decision. One of the reasons GCS scores are taken is to use a simple procedure to determine whether a patient's level of consciousness, and therefore his brain injury, is improving or deteriorating. I heard no evidence to suggest that the doctors requiring GCS testing after four days was unreasonable. On August 6, 2009 a CT scan of his head identified that Mr. Hodges had bleeding in his head. It was reasonable to employ the GCS test as a simple procedure to determine whether the area of bleeding had shrunk or grown until the doctors were satisfied that the risk of further bleeding had stopped. Therefore, I find that administering the GCS test on August 6, 2009 was within a reasonable period of time after the accident.

EXPENSES:

The parties may make written submissions to me if they cannot resolve the issue of entitlement of expenses of this preliminary issue. If they cannot resolve the issue of amount of expenses they may make written submissions to me after following the procedure set out in Rule 79.2 of the *Dispute Resolution Practice Code (4th ed.)*.



William J. Renahan
Arbitrator

May 22, 2012

Date