2003-636

Representative: Jane Michael, BPA
Decision No: 100000513636
Decision Type: Entitlement Appeal
Location of Hearing: Charlottetown, Prince Edward Island
Date of Decision: 7 January 2003

As a result of the Appellant's Entitlement Appeal hearing held 7 January 2003, this Board rules as follows:

RULING

LUMBAR DISC DISEASE

Award of one-fifth for that part of the disability or aggravation thereof that arose out of or was directly connected with service with the Royal Canadian Mounted Police.
Section 32, *RCMP Superannuation Act*
Subsection 21(2), *Pension Act*

Entitlement as previously awarded

Original signed by:
_____Presiding Member
E.A. McNally

_____Member
L.J. MacInnis

Original signed by:
_____Presiding Member
Robert Benoît

ISSUES

An Entitlement Appeal hearing was held, by way of a written submission, in Charlottetown, Prince Edward Island, on 7 January 2003 as the Appellant was dissatisfied with an Entitlement Review decision of 29 April 2002. Ms. Jane Michael, Bureau of Pensions Advocate, was the representative.

EVIDENCE

Submitted as additional evidence for this claim is:

EA-H1:	a statement from the Appellant dated 31 October 2002.
EA-H2:	a Technical Report entitled Low Back Pain Among RCMP Officers: An Investigation Into Vehicles, Duty Belts and Boots, dated September

1999.

EA-Attach-H1: a Final Medical Examination for R.C.M. Police Applicants dated 30 August 1971.

EA-Attach-H2: an Outpatient Clinical Record dated 16 July 1973.

EA-Attach-H3: a Physical Therapy Assessment Initial Assessment dated 4 August 1982.

EA-Attach-H4: a Consultant/Outpatient Clinical Record dated 24 August 1982.

EA-Attach-H5: a Consultant/Outpatient Clinical Record dated 29 September 1982.

EA-Attach-H6: a Consultant/Outpatient Clinical Record dated 7 October 1982.

EA-Attach-H7: a Case History report dated 26 October 1982.

EA-Attach-H8: a Case History report dated 12 October 1982.

EA-Attach-H9: a Case History report dated 3 November 1982.

EA-Attach-H10: a Medical Profile dated 16 July 1986.

EA-Attach-H11: a Physiotherapist's Examination dated 31 January 1990.

EA-Attach-H12: a Memo to C/Supt. W.R. Spring from Dr. K. Anstead dated 12 February 1990.

EA-Attach-H13: an e-mail communication between * and the Appellant dated June 1999.

Lumbar Disc Disease

FACTS AND ARGUMENT

The Advocate, in her written submission, argued on behalf of the Appellant that the Board should award entitlement to four-fifths or a full pension entitlement as suggested by the Orthopaedic Specialist, Dr. O.T. Portner. It was also submitted that there has been a significant misunderstanding. The Appellant has clarified the details of his particular circumstances, both at the testimony and in his statement dated 31 October 2002 (EA-H1).

When the Appellant entered RCMP service, he was found to have a normal spine as noted in the Final Medical Examination for R.C.M. Police Applicants dated 30 August 1971, EA-Attach-H1. He also stated that in September 1999, after 28 years as a plain clothes surveillance officer, he was transferred briefly to uniformed duty. He began having pain in his lower back whenever he was sitting in a police car. The pain was uncomfortable after prolonged hours in the car wearing the full service belt, including a gun and radio. The Appellant indicated, in his statement, that beginning in April 2000 and until the present time, he has been carrying out only operations of desk duty.

The Advocate stated that the medical relationship between the low back problems and RCMP vehicles and duty belts has been confirmed in a Technical Report entitled "Low Back Pain Among RCMP Officers: An Investigation Into Vehicles, Duty Belts and Boots", dated September 1999(EA-H2).

The Advocate also mentioned Dr. O.T. Portner's report and recommendation of December 2001.

On behalf of the Appellant, the Advocate submitted that there was no justification for withholding full pension entitlement based on the evidence before it. She stated that there was absolutely no confirmation that, in fact, the Appellant's back was injured prior to service. A full pension entitlement of five-fifths was requested.

REASONS AND CONCLUSION

The Board has carefully reviewed the Advocate's written submission, the medical evidence presented as evidence and has completed a full review of the file, including the Entitlement Review Panel's decision dated 29 April 2002 and the Minister's decision dated 28 September 2000. The Board concludes that there was no evidence of trauma related to RCMP service. Although not discussed in Dr. Portner's report, the Board considered the accident that occurred in 1970 or 1971, while the Appellant was employed as a lineman.

The Board's thorough review has resulted in the same conclusion rendered the Entitlement Review Panel on 29 April 2002. That Panel concluded as follows:

> ... As a result of the above, the Panel does not accept as authoritative the information concerning attributability provided by the Orthopedic Surgeon. Nevertheless, it does believe that a minimal aggravation would have been caused by the Applicant's duties while sitting in an unmarked surveillance vehicle, even though that surveillance vehicle was, according to the Applicant, quite comfortable, especially in relation to the official vehicle used for 5 months while in RCMP uniform. In the circumstances, a one-fifth aggravational award appears appropriate to represent the degree of aggravation caused by the Applicant's duties in the RCMP. The remaining four-fifths is withheld because of the pre-service accident involving a fall, which is recorded in the documentation on file as being 15 feet, the first complaint involving a non-service fishing incident only 2 years after the Applicant's enrollment, and the normal degeneration to a spine, which the Panel understands occurs after any invasive surgery. In the circumstances, for the reasons noted above, a one-fifth aggravational award appears appropriate and this Panel so rules.

The Board carefully considered EA-H2, the Technical Report entitled Low Back Pain Among RCMP Officers: An Investigation Into Vehicles, Duty Belts and Boots, dated September 1999.

The Panel obtained from the Canadian Police Research Centre the entire report from which excerpts had been presented to the Panel as evidence. The Panel considered the report and the Advocate's arguments as to its relevance and the weight it should be given in determining if and to what degree the injury and degenerative process experienced by the claimant might be causally linked to the claimant's service.

The report must be read in light of the Medical guidelines which state concerning degenerative disc disease:

> **1. DISC DISEASE (GENERAL)**
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> **Intervertebral Discs**
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> The vertebral bodies throughout the spine are separated from one another by intervertebral discs except in the case of the first and second cervical vertebrae, sacrum and coccyx. The disc is a highly resilient structure which allows greater motion between vertebral bodies than if the bony surfaces were directly in contact. Because of its elastic nature, the disc also functions as a shock absorber when the spine is subjected to vertical compression force.
>
> There are two components, the annulus fibrosus and the nucleus pulposus. The annulus forms the outer boundary and is composed of fibrocartilaginous (mainly fibrous) tissue, arranged in concentric rings in which the fibres run obliquely from one vertebra to the next. The fibres in successive layers slant in alternate directions. The peripheral fibres pass over the cartilaginous end plates to unite with the bone of the vertebral bodies. The annulus essentially is thicker anteriorly.
>
> The nucleus pulposus, situated between the middle and posterior thirds of a disc is highly elastic, consisting of collagen fibres in a muco-protein gel. The fluid behaviour of the nucleus pulposus converts a vertical pressure to a horizontal thrust and hence the energy is extended to the annulus fibrosus. Intervertebral discs account for about 25% of the length of the vertebral column above thesacrum. This proportion decreases with the degeneration of aging.

Manifestation of Disc Disease

Degenerative changes occur in the intervertebral disc during a life-time, but these natural changes, in the absence of clinical symptoms, are not evidence of disability.

Disc disease manifests itself in three ways:

1. Symptoms from changes in the disc itself resulting in restricted mobility.
2. Symptoms from complications of disc disease due to protrusion of the disc causing nerve root pressure or cord pressure.
3. Bony changes with the formation of osteophytes which may completely bridge the disc space and limit movement, or impinge on spinal nerve foramina to cause root entrapment.

Clinical Terminology

The following terms apply to disc disease:

Disc Degeneration

The pathophysiological changes which occur within the disc components involve both the nucleus pulposus and the annulus fibrosus.

Disc Protrusion of Herniation

The nucleus pulposus may bulge through, protrude through, or actually be extruded through the annulus. In the latter case, one refers to sequestration of disc material.

Osteoarthritis

This term is applied when hypertrophic osteophytes are seen radiologically in relation to the margins of the vertebral bodies or apophyseal joints, and from Veterans Affairs Canada's point of view the term is synonymous with moderately advanced degenerative disc disease.

Spondylosis

The term spondylosis is often used synonymously with late stage disc disease. The term is usually applied in reference to the cervical spine. It denotes disc degeneration with radiological findings as outlined under the term osteoarthritis.

2. LUMBAR DISC DISEASE

Lumbar Disc Disease, like osteoarthritis and arteriosclerosis, is fundamentally a natural degenerative condition associated with the ageing process, commencing early in life and progressing steadily thereafter. In any individual, the rate of this progression is determined mainly by constitutional factors. Trauma may alter this natural process.

The absence of x-ray evidence of disc disease does not exclude the presence of degenerative changes of sufficient degree to cause disability. On the other hand, x-ray evidence of disc degeneration may be present without any clinical symptoms of disability or actual disc disease.

The following pathological facts must be clearly understood:

(1) Disc degeneration starts at a very early age. At birth, the nucleus of the disc is a well-defined structure clearly demarcated from the annulus of the disc. By the second and third decades, the border between the nucleus and annulus is less well-defined. Fibrous elements are more prominent. There is a progressive cavitation and desiccation of the nucleus in the fourth and fifth decades and the condition is more frequently symptomatic. At the same time, radial cracks occur in the annulus most frequently at the postero-lateral margins of the disc space.

(2) A healthy normally functioning disc can withstand vertical stresses of approximately 600 kgs. Severe vertical pressure alone would cause disruption of the vertebral plate or a compression fracture of a vertebral body before it would cause rupture of a healthy disc.

When the force is applied in flexion, it is estimated that there is an increase in the stress on the disc of approximately two and a half times that which occurs on vertical compression alone. A rotational element in the movement further increases the risk of injury to the disc.

When advanced degeneration is present, rupture of the disc may occur from a vertical load of approximately 200 kgs.

(3) The relative importance of degenerative change and injury causing clinical disability varies with age and with individual factors. In a small percentage of cases, perhaps 5% of persons under 55 years of age, a severe injury could be held totally responsible for the disability (regardless of the presence of pre-existing degenerative changes). It has been estimated that 75% of people in the older age group have some low back disability due to disc instability resulting from normal degenerative changes.

De Palma and Rothman, in their book "The Intravertebral Disc", outline the relationship between degenerative changes and trauma in following manner:

> Disc degeneration is not usually due to one insult, but rather to the combined ravages of the biochemical and mechanical changes of ageing, associated with longstanding mechanical stress. A history of injury which may have precipitated a low back syndrome may often be elicited, but this injury has played an incidental role in what is truly a chronic degenerative process.

It is thus apparent that the natural history of the progressive degenerative changes in the discs must be taken into account in determining what fraction of the disability can reasonably be attributed directly to service. Service factors may cause aggravation (permanent worsening) of the degenerative process. The degree of aggravation is expressed in fifths.

> (1) Some degree of disc degeneration is already present at the time of enlistment although the condition would usually be asymptomatic.
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> (2) Disc Disease is practically never obvious on enlistment as this term is defined in the Pension Act.
>
> (3) Information given on enlistment or subsequently during service concerning previous low back or sciatic pain can beyond reasonable doubt be considered evidence of disc disease, if corroborated by the finding of clinical or radiological evidence of disc degeneration or disease within ten years, provided only that there is no objective evidence of any other cause of the same low back or sciatic pain.
>
> (4) The degree of aggravation which can be assessed under subsection 21(1) or the degree of service relationship under subsection 21(2) of the *Pension Act* varies with:

(a) **The Presence or Absence of Symptoms or Signs Prior to Injury**

> If, prior to an incident, disc disease has been symptomatic and/or there is x-ray evidence of degeneration, the degree of aggravation recommended will be usually less than when the incident initiates the first manifestation of the condition.

(b) **The Age at Which the Claimed Injury Occurred**

> A given injury precipitating symptoms in a 20 year old person warrants a higher degree of aggravation than a comparable event initiating symptoms at 40 years of age. This is because in a younger person the discs and supporting soft tissues have not been affected by the degenerative changes to the same degree and, hence, are more resistant to injury.

(c) **The Severity of the Precipitating Incident or Injury in Relation to the Onset of Symptoms at Any Age**

(i) Normal service activities precipitating symptoms, are not aggravating factors beyond those accepted as part of the normal wear and tear of living and aging.

(ii) A severe unexpected injury involving flexion and rotational components would cause greater aggravation than injury under controlled conditions such as a deliberate lift.

(iii) Direct trauma, in the absence of flexion compression and rotational components, rarely is a causative or aggravating factor in disc disease.

(d) **The Time Interval Between the Injury and the Onset of Continuing Disability**

(i) An isolated episode of back strain which causes an acute disability limited to the back, for 3 weeks or less, and is followed by an asymptomatic period of 5 years, is considered to be a self-limiting soft tissue injury. Soft tissue injuries do heal and, if followed by a 5 year asymptomatic interval, are not considered to aggravate the normal degenerative process.

(ii) An asymptomatic interval of less than 5 years before the diagnosis of disc disease probably indicates some degree of aggravation, and the degree will be determined by the level of disability found and the time interval before diagnosis.

(iii) Recurring or continuous symptoms which lead to continuous disability and surgical intervention probably indicate a greater degree of aggravation.

DEVELOPMENTAL AND TRAUMATIC CONDITIONS OF THE LUMBOSACRAL SPINE AND THEIR EFFECT ON LUMBAR DISC DISEASE.

1) SPINA BIFIDA PER SE does not contribute nor predispose to the development of lumbar disc disease.

2) Sacralization of the lumbar spine and lumbarization of the sacral spine may accelerate lumbar disc degeneration to a mild degree.

3) Spondylolysis and spondylolisthesis by their nature cause instability of the lumbosacral spine. This instability has an adverse effect on the disc immediately below the displaced vertebrae and influences the development of degenerative changes to a moderate to severe degree.

4) A fixed scoliosis in the lumbar spine may influence the development of degenerative changes to a minimal degree.

5) Fracture of the vertebral body is considered to severely affect development of degenerative changes. Such changes occurring in the area of a fractured vertebra should be considered part and parcel of the entitlement and included in the assessment. A fractured transverse process, on the other hand, is caused by a different type of injury than an injury that would cause disc damage. A transverse process fracture is caused by a lateral flexion injury and not the flexion-rotation injury that normally damages a disc. Lumbar disc disease therefore, cannot be considered consequential to an injury that caused a fractured transverse process by itself.

MECHANICAL LOW BACK PAIN

Low back pain is a symptom and not a diagnosis, but has been used by consultants as a non-specific term referring to various conditions where no definite etiology has been established to indicate that the origin of the pain is musculo-skeletal, and not arising in, nor referred from other organ systems. Mechanical low back strain is a preferred term to indicate such a disabling condition (Lumbo Sacral Strain). Physicians should not use the

> term in cases of back pain that is believed due to early degenerative changes of the spine, particularly of the facet joints. In such cases the diagnosis may be difficult to confirm radiologically, but eventually almost all such complainants show progressive degenerative changes and the diagnosis becomes evident. In cases of claims for "mechanical low back pain" or "strain", the disability should be clarified, and a more specific alternate diagnosis sought before ruling and assessment. Because of the non-specific nature of the term "mechanical low back pain" it constitutes a symptom rather than a diagnosis. In cases of claims for such a non-specific diagnosis, a specific diagnosis and clarification of impairment are required for a ruling assessment.

The Canadian Police Research Centre report completed in 1999 did not attempt to determine if permanent disabilities were caused by sitting in police cars but rather sought ways to minimize the instances of low back pain and injury among RCMP officers. The study cited as its basis the fact that a significant amount of work time was being lost because RCMP officers were experiencing low back pain. It did not cite an increased incidence of degenerative disc disease. The study states that police are not significantly more likely than anyone else to have low-back pain and injury and that once an injury has “precipitated” in most cases recurrence is common. The study cites relevant literature on the topic but given that it was published in 1999 does not contain information on the most recent studies about degenerative disc disease and it relation to motor vehicle operation and the resulting vibration. The fact that the study found that police officers did not have a higher incidence of low back pain than the general population does not mean that RCMP duty requirements could not cause low back problems. But low back pain is not the same as degenerative disc disease as the departmental medical guidelines make clear. Simply because some car seats may cause or contribute to instances of low back pain is not the same as a finding that sitting in a car seat causes permanent disability from degenerative disc disease.

The Panel also carefully examined the letter from Dr. Portner which had formed part of the evidence before the Review Panel. The Review Panel had rejected the physician’s conclusion as to the extent to which the Appellant’s duties would have contributed to his permanent disability from degenerative lumbar disc disease.

Under subsection 39(b) of the *Veterans Review and Appeal Board Act*, the Board must accept any uncontradicted evidence presented to it by the applicant or appellant that it considers to be credible in the circumstances. The Review Panel, although finding it credible that the Appellant’s service duties might have had some minimal aggravational effect on the Appellant’s lumbar disc disease, did not accept as credible the physician’s conclusion as to the possible degree of aggravation from service factors because it did not believe that the conclusion was based on a complete or accurate history.

The Panel recognizes that the judicial review application decisions from the Federal Court Trial Division on the issue of whether or not a medical opinion could be viewed as not credible for the purposes of a permanent disability pension award are divided at present. In the case of *Teubert v. Attorney General of Canada and Department of Veterans Affairs* (4 June 2002) T-451-01 FCT 634 Hansen J. the decision found that the Board could not require a medical opinion to include an accurate history. In the more recent case of *Woo v. Attorney General of Canada* (28 November 2002) T-1688-01 2002 FCT 1233 Tremblay-Lamer J. the Federal Court direction is that the Board may view a medical opinion as not credible if it does not include a complete and accurate anamnesis (medical history). With respect to the departmental medical guidelines however the direction from the Court is that the Board may apply them. This has been made clear in the decision of *Kripps v. Attorney General of Canada* (17 May 2002) T-870-01 2002 FCT 575 Pinard J. and in *Gavin v. Attorney General of Canada* (7 May 1999) T-1875-98 McKeown J. (F.C.T.D.)

The Board believes in this case, it must insist on having a medical opinion with a history that is supported by the rest of the evidence on the file. The issue in this case is a significant one in that the Appellant is attempting to tie non-traumatic RCMP duties to a degenerative condition of the spine which, according to the departmental medical guidelines, is associated with traumatic injuries and constitutional factors and occurs in a very high percentage of the population.

The Board has set out in previous case what it would generally consider to be a credible medical opinion for the award of permanent disability pension and has made that information available to

advocates. In *Veterans Review and Appeal Board Decision* # 6671744 (25 October 1999) the Board set out its expectations with regard to "medical" evidence in light of its duty to weigh or assess the credibility of the evidence it admits. There are three important factors: The qualifications of the expert providing the evidence; the accuracy and completeness of the information the expert has access to in order to render the opinion; the persuasiveness of the expert's conclusion which is determined by whether or not the conclusion flows logically from the facts; the degree to which the expert explored all the relevant factors and whether or not the opinion could be accepted as reflecting the general medical consensus as established through scientific study of the relevant condition.

Ultimately the Board members and not the physician who provides some of the evidence must decide if the provisions of the *Pension Act* permit an award and the extent of the award. The Board defers to medical experts in medical matters including diagnosis and the identifying of causation factors. But in applying the physician's findings of fact and conclusions regrading the causation of a claimed condition to the wording of the *Pension Act*, the Board cannot simply delegate its decision to the physician expert but rather must weigh the evidence carefully in view of the legislative provisions to determine the ultimate pension entitlement decision. It is easy to understand the reason for the requirement that the Board not simply delegate its decision-making authority to someone else when one understands that physicians as individuals bring varying degrees of both conscientious medical investigation and patient advocacy to their report writing. Questions that confront the Board in almost every case are: What factors has the physician considered in making a diagnosis and attribution of cause? And, to what degree is he or she operating as an advocate for a patient as opposed to an independent medical expert?

The Panel notes that the Board has the authority to reconsider appeal decision under section 32 of the *Veterans Review and Appeal Board Act* on application if new evidence is presented to the appeal panel. At present however in this case, the Panel does not believe that it has before it uncontradicted evidence that it considers to be credible in the circumstances as required by subsection 39(b) of the *Veterans Review and Appeal Board Act*, that would support the award of a permanent pension beyond the ruling made by the Review Panel. The Panel does not have a doubt under subsection 39(c) of the Act that the Appellant, based on the evidence presented, has established a case for a greater award.

This Board affirms the Entitlement Review Panel's decision dated 29 April 2002 awarding a one-fifth pension entitlement. This Board so rules.

In arriving at this decision, this Board has carefully reviewed all the evidence, medical records and the submissions presented by the Representative, and has complied fully with the statutory obligation to resolve any doubt in the weighing of evidence in favour of the Applicant or Appellant as contained in sections 3 and 39 of the *Veterans Review and Appeal Board Act*.

RELEVANT LEGISLATION

Section 32 of the *Royal Canadian Mounted Police Superannuation Act* states that an award in accordance with the Pension Act shall be granted to or in respect of

a. any person to whom Part VI of the former Act applied at any time before April 1, 1960, who, either before or after that time, has suffered a disability or has died, or

b. any person who served in the Force at any time after March 31, 1960 as a contributor under Part I of this Act, and who has suffered a disability, either before or after that time, or has died,

in any case where the injury or disease or aggravation thereof resulting in the disability or death in respect of which the application for pension is made arose out of, or was directly connected with, the person's service in the Force.

Paragraph 21(2)(a) of the *Pension Act* states that in respect of military service rendered in the non-permanent active militia or in the reserve army during World War II and in respect of military service in peace time, where a member of the forces suffers disability resulting from an injury or

disease or an aggravation thereof that arose out of or was directly connected with such military service, a pension shall, on application, be awarded to or in respect of the member.

Section 25 of the *Veterans Review and Appeal Board Act* states that an applicant who is dissatisfied with a decision made under section 21 or 23 may appeal the decision to the Board.

Section 26 of the *Veterans Review and Appeal Board Act* states that the Board has full and exclusive jurisdiction to hear, determine and deal with all appeals that may be made to the Board under section 25 or under the *War Veterans Allowance Act* or any other Act of Parliament, and all matters related to those appeals.

Subsection 29(1) of the *Veterans Review and Appeal Board Act* states that an appeal panel may

> (a) affirm, vary or reverse the decision being appealed;
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> (b) refer any matter back to the person or review panel that made the decision being appealed for reconsideration, re-hearing or further investigation; or
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> (c) refer any matter not dealt with in the decision back to that person or review panel for a decision.

Section 3 of the *Veterans Review and Appeal Board Act* states that the provisions of this Act and of any other Act of Parliament or of any regulations made under this or any other Act of Parliament conferring or imposing jurisdiction, powers, duties or functions on the Board shall be liberally construed and interpreted to the end that the recognized obligation of the people and the Government of Canada to those who have served their country so well and to their dependants may be fulfilled.

Section 39 of the *Veterans Review and Appeal Board Act* states that in all proceedings under this act, the Board shall draw from all the circumstances of the case and all the evidence presented to it every reasonable inference in favour of the applicant or appellant; accept any uncontradicted evidence presented to it by the applicant or appellant that it considers to be credible in the circumstances; and resolve in favour of the applicant or appellant any doubt, in the weighing of evidence, as to whether the applicant or appellant has established a case.

Subsection 28(1) of the *Veterans Review and Appeal Board Act* states that an appellant may make a written submission to the appeal panel or may appear before it, in person or by representative and at their own expense, to present evidence and oral arguments.

DECISION BEING APPEALED

LUMBAR DISC DISEASE

THE BOARD REVERSES THE MINISTER'S DECISION

Award of one-fifth for that part of the disability or aggravation thereof that arose out of or was directly connected with service with the Royal Canadian Mounted Police.
Subsection 32(1), *RCMP Superannuation Act*
Subsection 21(2), *Pension Act*

VRAB Entitlement Review, 29 April 2002

The Appellant first applied for pension entitlement for lumbar disc disease while he was still serving.