Guidelines for Evaluation of Permanent Impairment of Genito-Urinary System

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Disability Assessment – Genito-Urinary System

Introduction :

Disability is not always obvious. The Equality Act 2010 defines a person as disabled if they have a physical or mental impairment that has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities.

- 'Long-term' usually means the impairment should have lasted or be expected to last at least a year
- Substantial' means not minor or trivial

The basis of disability evaluations is the ability of the body as a whole, or of the psyche, or of a system or organ of the body to function under the ordinary conditions of daily life including employment. Whether the upper or lower extremities, the back or abdominal wall, the eyes or ears, or the cardiovascular, digestive, or other system, or psyche are affected, evaluations are based upon lack of usefulness, of these parts or systems, especially in self-support. This imposes upon the medical examiner the responsibility of furnishing, in addition to the etiological, anatomical, pathological, laboratory and prognostic data required for ordinary medical classification, full description of the effects of disability upon the person's ordinary activity.

The ability to overcome the handicap of disability varies widely among individuals. The rating, however, is based primarily upon the average impairment in earning capacity, that is, upon the economic or industrial handicap which must be overcome and not from individual success in overcoming it. However, full consideration must be given to unusual physical or mental effects in individual cases, to peculiar effects of occupational activities, to defects in physical or mental endowment preventing the usual amount of success in overcoming the handicap of disability and to the effect of combinations of disability.

Impairment of function as a result of injury or disease is a common occurrence and usually leads to a claim for compensation when it is permanent. Evaluation of such permanent impairment and subsequent disability is an important and a complex subject. Unfortunately, in our country there are no universally accepted and followed guidelines,

barring the Armed forces , to assist the specialist in completely fulfilling the responsibility.

In this presentation, an attempt is made to provide few guidelines which help in rationalizing the system. It is stressed that these are not hard and fast inviolable rules but only guiding principles, which when combined with the objective and circumstantial evidence will enable the specialist to arrive at reasonably accurate conclusions.

In formulating these guidelines , Indian Armed forces disability rules and the American Medical Association rules have been used as references which were of immense value.

General guidelines :

The impairment can be assessed accurately only when the data regarding pre-existing health conditions are known before the individual is taken into the service and the prevailing service conditions in which the individual works are specified and the circumstances under which the disability has been acquired or aggravated are recorded properly. This is possible only when there is a strict and uniform pre enrolment medical examination, properly documented and conducted periodic health checkups carried out throughout the individual's service and the final medical examination conducted at the end of the service, as is done in Armed forces. In most of the states and service organizations such a methodical procedure is not followed and as such proper assessment of the disability and its attributability are most often arbitrary and inaccurate.

INTERPRETATION OF THE DISABILITY

Different examiners, at different times, will not describe the same disability in the same language. Features of the disability which must have persisted unchanged may be overlooked or a change for the better or worse may not be accurately appreciated or described. It is the responsibility of the rating specialist to interpret reports of examination in the light of the whole recorded history, reconciling the various reports into a consistent picture so that the current rating may accurately reflect the elements of disability present. If a diagnosis is not supported by the findings on the examination report or if the report does not contain sufficient detail, it is incumbent upon the rating board to return the

report as inadequate for evaluation purposes.

In order to make the matters clear, explanation of the commonly used terms are provided:

1. PERMANENT IMPAIRMENT is any anatomic or functional abnormality or loss of physical or mental capacity suffered by injury or disease after maximal medical rehabilitation has been achieved and is considered stable or non progressive at the time of evaluation.

2. PERMANENT DISABILITY is a physical or mental condition when actual or presumed ability to engage in a gainful activity is reduced or absent because of impairment.

3. EVALUATION OF PERMANENT IMPAIRMENT is the function of the specialist concerned alone and defines the scope of the medical responsibility and therefore represents the physician's role in the evaluation of Permanent Disability. Evaluation of Permanent impairment is an appraisal of the nature and extent of the patient's illness or injury as it affects his personal efficiency in one or more activities of daily living.

4. EVALUATION OF PERMANENT DISABILITY is an appraisal of the present and future ability to engage in gainful activity as it is affected by such diverse factors as age, sex, education, economic and social environment, in addition to the deficit medical factor – Permanent Impairment. The final determination of permanent disability is an administrative decision as to the patient's entitlement.

5. ENTITLEMENT is the recognition by the pension sanctioning authority after consideration of both the medical and non-medical evidence that a disability has been influenced in its onset or course by the conditions of service.

6. CASUAL CONNECTION: Before an award can be made for a disability or death claimed to be related to service, a casual connection between disability or death and service has to be established by evidence.

7. Although the certificate of a properly constituted medical authority

vis-à-vis the disability or death, forms the basis of compensation payable by Government, the decision to admit or refuse entitlement is not a solely a matter which can be determined finally by the medical authorities alone. It may require also the consideration of other circumstances, service conditions, pre and post service history, verification, wound or injury, corroboration of statements, collecting and weighing the value of evidence and in some instances matters of service law and discipline.

8. While the question of entitlement on purely medical grounds presents little or no difficulty in the case of a wound or injury, cases falling in the category of disease may present varying degrees of difficulty.

9. If it is established on evidence that the disease was brought about by service conditions, then attributability is clearly indicated. If on the other hand, a disease not attributable to service, having been of pre enrolment origin or having its origin in other than service conditions, has been influenced in its subsequent course by condition of service, the claim would stand for acceptance on the basis of aggreviation.

10. NIL DISABALEMENT means that although a definite disability is or has been in evidence, any impairment resulting from, has either ceased or has become so small as not to be appreciable.

11. NO DISABILITY means a case where an individual is said to be suffering from a disability but medical science can find no evidence of the existence of that disability either present or past.

12. Unlike disability, permanent impairment can be measured with a reasonable degree of accuracy and uniformity, as it is evidenced by loss of structural integrity, loss of functional capacity or persistent pain that is substantiated by clinical findings

13. Each guide contains recommended percentage values related to the criteria provided.

14. Use of numerical values is preferred and they provide a practical means of expressing and calculating the extent of permanent

impairment and encourage accurate, equitable and uniform evaluation.

15. When a single impairment is involved, the percentage value may be read directly from the text or referred to appropriate tables. On the other, if two or more impairments are involved, the value of each impairment must be ascertained and transported to a common denominator, such as the whole man. Thereafter these values must be combined rather than added. A combination of impairments may be assessed.

16. After the values of all impairments have been computed and transposed to a common denominator, the final impairment value should be expressed in terms of the nearest 5%

This guide provides criteria for evaluating the effects that permanent impairment of the Genito-Urinary system has on the ability of an individual to perform the activities of daily living. These systems are discussed in terms of:

(i) Upper Urinary tract , with a section on Urinary diversion
(ii) Bladder
(iii) Urethra
(iv) Male reproductive system organs

METHOD OF EVALUATION

No estimation of permanent impairment should be attempted until maximal medical and surgical treatment has been carried out and a reasonable period has elapsed so that the optimal effect of the treatment may be obtained.

Competent evaluation presupposes that necessary facilities for clinical and laboratory examinations are available to the specialist. Evaluation of impairment is usually possible through the exercise of sound clinical judgement which is based on a detailed history, past and present, a thorough physical examination and the judicious use of appropriate laboratory procedures. It is not intended to imply by such enumeration that all the techniques listed are necessary for proper evaluation nor that only the techniques listed are to be considered.

When making oral or written reports, the specialist should give a full

account of his findings and observations before he gives any statement of conclusions. He should explain and substantiate his conclusions about the patient's impairment.

1. **Upper Urinary tract:**
   The renal clearance of endogenous creatinine can ordinarily serve as guidelines for evaluating function of upper urinary tract.

   Serum creatinine is not a ideal marker of GFR, because it is both filtered at the glomerulus and secreted by proximal tubule. Creatinine clearance (Cr Cl) is known to overestimate GFR by as much as 20% in healthy individuals and by even more in patients with CKD. Estimates of GFR based on 24 hour Cr Cl require timed urine collection, which are difficult to obtain and often involve errors in collection.

   In adults, the normal GFR based on inulin clearance and adjusted to a standard body surface area of 1.73 m2 is 127ml/min per 1.73m2 for men and 118ml per minute per 1.73m2 for women, with a standard deviation of approximately 20ml/minute per 1.73m2. After age 30, average decrease in GFR is 1ml per minute per 1.73m2 per year.

   The GFR can be estimated by using formula
   eGFR = (140-age)(weight in kg)/ (Ser Cr)(72)

   For females the above formula has to be multiplied by 0.85

   Modification of Diet in renal disease (MDRD) is recommended for routine use and requires only Ser Creatinine, age , gender and race.

   Calculations can be made using available web based and downloadable medical calculator
   (www.kidney.org/professionals/KDOQI/gfr_calculator.cfm)

   It may be desirable to perform additional investigations, such as metabolic studies, serum and urine biochemical determinations, osmolalities, urine analysis, cultures, Radiographic & Ultrasound scan Investigation, Isotope scans. Assessment of parenchymal disfigurement and or conduit abnormality may require such diagnostic procedure as endoscopy with total and separate function studies, Biopsy and Uro-radiographic evaluation.

It is to be noted that an individual with a solitary kidney, from a physiological point of view, may have no actual impairment or renal function, nevertheless, there exists an absence of or loss of the normal safety factor which may be of potential significance in subsequently evaluating the disability depending on the cause of the solitary kidney. The individual with solitary kidney, regardless of cause, should be rated as having 10 % impairment of the whole man because he has had a structural loss of an essential organ. This value to be combined with any other permanent impairment, including any impairment in the remaining kidney, pertinent to the case under consideration.

(Percentage impairment for Upper Urinary tract is given in Appendix–A)

1. **Urinary Diversions**

   These are evaluated as a part of and in conjunction with the assessment of that portion of the Urinary tract which is involved. Irrespective of how well these diversions function in the preservation of renal integrity and the disposition of urine, the following values of the diversions should be combined with those determined under the criteria previously given for the portion of the urinary tract involved.

Type of Diversion	Impairment of whole man %
1. Ureterointestinal diversions	10
2. Cutaneous Ureterostomy without intubation	10
3. Nephrostomy or intubated Ureterostomy	15

2. **Urinary Bladder :**

   Evaluation of function of the Bladder : These include , but are not limited to Cystoscopy, Cystography, Ultrasound scan, Voiding-Cystourethrography, Urodynamic studies, Urine analysis and cultures.

   When evaluating permanent impairment of the bladder, the status of the Upper Urinary tract must also be considered. The appropriate impairment values for both should be combined in determining the extent of the impairment of the whole man.

   (Percentage impairment for Urinary bladder is given in Appendix–B)

3. **Urethra :**

Evaluation of Urethra: These include, but are not limited to Retrograde-Urethrography, Cystourethrography, Urethroscopy, Urethral pressure profilometry.

When evaluating the permanent impairment of the Urethra, the status of the Upper urinary tract and Bladder must also be considered. The appropriate values for all should be combined in determining the extent of impairment in the whole man.

(Percentage impairment for Urethra is given in Appendix-C)

4. **A. Penis :**

When evaluating impairment of the penis, it is necessary to consider impairment of both the sexual and the urinary functions. The degree of sexual function impairment should be determined in accordance with the criteria which follow & should be combined with an appropriate value for any urinary function disability.

(Percentage impairment for Penis is given in Appendix–D)

B. Scrotum :

(Percentage impairment for scrotum is given in Appendix–E)

C. Testes, Epididymides and Spermatic cords :

Evaluation of function of the Testes, Epididymides and Spermatic cords : These include, but are not limited to Vasography, Doppler studies, Biopsy, Semen analysis, Hormonal studies – FSH, LH, Ser Testosterone, Prolactin and other hormonal studies Ultrasound studies of scrotum.

(Percentage impairment for Testes, Epididymides and Spermatic cords is given in Appendix –F)

D. Prostate and Seminal vesicles :

Evaluation of function of Prostate and Seminal vesicles :
These includes, but not limited to, Endoscopy, Ultrasound scanning, CT scan, MRI scan, Biopsy, Examination of prostatic secretions and Hormonal studies.

(Percentage impairment for prostate and seminal vesicles is given in Appendix – G)

APPENDIX - A

Classes of Upper Urinary tract impairment

Class – I Impairment 0% - 10%

Diminution of Upper urinary tract function as evidenced by eGFR 60 to 89 ml/min

OR

Intermittent symptoms and signs of Upper urinary tract dysfunction not requiring continuous treatment or surveillance

CLASS –II Impairment 15%-30%

Diminution of Upper urinary tract function as evidenced by eGFR 30-59ml/min

OR

Although eGFRis more than 60ml/min, symptoms and signs of upper urinary tract disease or dysfunction necessitate continuous surveillance and frequent treatment

CLASS –III Impairment 35%- 60%

Diminution of Upper urinary tract function as evidenced by eGFR 15 - 29ml/min

OR

Although eGFR is more than 30ml/min, symptoms and signs of upper urinary tract disease or dysfunction are incompletely controlled by surgical or continuous medical treatment

CLASS – IV Impairment 65% - 90%

Diminution of Upper urinary tract function as evidenced by e GFR <15ml/min

OR

Although eGFR is more than 15ml/min, symptoms and signs of Upper urinary tract disease or dysfunction persist despite surgical or continuous medical treatment.

Kidney, removal of one: Minimum evaluation 30%

Or

Rate as Upper tract impairment if there is nephritis, infection, or pathology of the other

APPENDIX – B

Classes of Urinary Bladder Impairment

CLASS – I Impairment 0% - 10%
There are symptoms and signs of bladder disorder requiring intermittent treatment, but without intervening malfunction

CLASS – II Impairment 15% - 20%
There are symptoms and signs of bladder disorder requiring continuous treatment.
OR
There is good bladder reflex activity but no voluntary control

CLASS – III Impairment 25% - 35%
There is poor bladder reflex activity (intermittent dribbling) and no voluntary control

CLASS – IV Impairment 40%-60%
There is no reflex or voluntary control of the bladder (continuous dribbling)

Voiding dysfunction:
Rate particular condition as urine leakage, frequency, or obstructed voiding.
Continual Urine Leakage, Post Surgical Urinary Diversion, Urinary Incontinence, or Stress Incontinence:
Requiring the use of an appliance or the wearing of absorbent materials which must be changed more than 4 times per day ... 60%
Requiring the wearing of absorbent materials which must be changed 2 to 4 times per day 40%
Requiring the wearing of absorbent materials which must be changed less than 2 times per day 20%

Obstructed voiding:
Urinary retention requiring intermittent or continuous catheterization 30%
Marked obstructive symptomatology (hesitancy, slow or weak stream, decreased force of stream) with any one or combination of the following:
1. Post void residuals greater than 150 cc

2. Uroflowmetry; markedly diminished peak flow rate
(less than 10 cc/sec)
3. Recurrent urinary tract infections secondary to obstruction 10%

Bladder, fistula of:
Rate as voiding dysfunction or urinary tract infection, whichever is predominant.
Postoperative, suprapubic cystotomy 30%

Bladder, injury of:
Rate as voiding dysfunction.

APPENDIX – C

Classes of Urethral Impairment

CLASS – I Impairment 0% - 5%

There are symptoms and signs of urethral disorder present which require intermittent therapy for control

Obstructive symptomatology with or without stricture disease requiring dilatation 1 to 2 times per year 0%

CLASS – II Impairment 10% - 20%

There are symptoms and signs of urethral disorder which cannot be effectively controlled by treatment.

Stricture disease requiring periodic dilatation every 2 to 3 months 10%

CLASS –III Impairment 20% - 30%

There are symptoms and signs of urethral disorder which requires diversion in form of suprapubic cystostomy as permanent measure

APPENDIX – D

Classes of Penile Impairment

CLASS – I Impairment 5% - 10%

Sexual function is possible but with varying degrees of difficulty of erection/ ejaculation

CLASS – II Impairment 10% - 15%

Sexual function is possible with sufficient erection but without ejaculation

CLASS – III Impairment 20% - 30%

No sexual function is possible

Penis, removal of half or more 30%
Penis, removal of glans 20%
Penis, deformity, with loss of erectile power 20%

APPENDIX – E

Classes of Scrotal Impairment

Class – I Impairment 0% -5%
There are symptoms and signs of scrotal loss or disease and there is no evidence of testicular malfunction, although there may be testicular malposition

Class – II Impairment 10% -15%
There are symptoms and signs of architectural alteration or disease of the scrotum such that the testes should be implanted in other than a scrotal position to preserve testicular function and pain or discomfort is present with activity
OR
There is total loss of scrotum.

APPENDIX – F

Classes of Testes, Epididymides and Spermatic Cord Impairment

Class – I Impairment 0% - 5%

Symptoms and signs of testicular, epididymal and / or spermatic cord disease are present and there is anatomic alteration and continuous treatment is not required and there are no abnormalities of seminal or hormonal function

OR

Solitary testis is present

CLASS – II Impairment 10% - 15%

Symptoms and signs of testicular, epididymal and / or spermatic cord disease are present and there is anatomic alteration and frequent or continuous treatment is required and there are detectable seminal or hormonal abnormalities

CLASS – III Impairment 15% - 20%

When trauma or disease produces bilateral anatomical loss or there is no detectable seminal or hormonal function of testes, epididymides and /or spermatic cords.

Testis, atrophy complete:

Both 20%

One 05%

Testis, removal:

Both 30%

One 05%

APPENDIX - G

Classes of Prostate and Seminal Vesicles Impairment

Class - I Impairment 0% - 5%
There are symptoms and signs of prostatic and /or seminal vesicular dysfunction or disease present and anatomic alteration is present and continuous treatment is not required.

Class - II Impairment 10%- 15%
Frequent severe symptoms and signs of prostatic and/or seminal vesicular dysfunction or disease are present and anatomic alteration is present and continuous treatment is required.

Class - III Impairment 15%- 20%
There has been ablation of the prostate and /or seminal vesicles.

Malignant neoplasms of the genitourinary system 100

Note:
Following the cessation of surgical, X-ray, antineoplastic chemotherapy or other therapeutic procedure, the rating of 100 percent shall continue with a mandatory examination at the expiration of six months. Any change in evaluation based upon that or any subsequent examination shall be subject to the assessment by the expert. If there has been no local recurrence or metastasis, rate on residuals as voiding dysfunction or Upper tract impairment whichever is predominant.