

F. Psychosocial Issues Educational Supplement

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F1. Post-Stroke Depression

F1.1 Depression: General Information

F1.1.1 Depression: General Information

Q1. Give three possible explanations why post-stroke depression is common.

F1.1.2 Prevalence and Natural History of Post-Stroke Depression

Q2. How common is depression following a stroke?

F1.1.3 Stroke Location and Depression

Q3. Describe the relationship between post-stroke depression and the location of the stroke in the brain.

F1.4 Assessment of Post-Stroke Depression

Q4. How well is depression diagnosed after a stroke?

F1.2 Impairment and Depression Post-Stroke

F1.2.1 Functional Impairment and Depression Post-Stroke

Q1. Describe the relationship between functional ability and depression.

F1.2.2 Cognitive Impairment and Depression Post-Stroke

Q2. What is the impact of post-stroke depression on cognitive impairment?

F1.3 Prevention of Post-Stroke Depression

Q1. What evidence is there for preventative treatment of post-stroke depression?

F1.4 Treatment of Post-Stroke Depression

AHA/ASA Endorsed Guidelines for the Management of Adult Stroke Rehabilitation Care: Recommendations for Mood Disturbance: Depression and Emotionalism (Duncan et al. 2005)

Assessment

- The Working Group makes no recommendation for the use of any specific diagnostic tool over another.
- Recommend using a structured inventory to assess specific psychiatric symptoms and monitor symptom change over time.
- Recommend assessing poststroke patients for other psychiatric illnesses, including anxiety, bipolar illness and pathological affect.

Treatment

- Strongly recommend that patients with a diagnosed depressive disorder be given a trial of antidepressant medication, if no contraindication exists.
- The Working group makes no recommendation for the use of one class of antidepressants over another; however, side effect profiles suggest that SSRIs may be favoured in this patient population.
- Recommend SSRIs as the antidepressant of choice in patients with severe, persistent, or troublesome tearfulness.
- There is insufficient evidence to recommend for or against the use of individual psychotherapy alone in the treatment of PSD.
- Recommend patients be given information, advice, and the opportunity to talk about the impact of the illness on their lives.
- Routine use of prophylactic antidepressants is not recommended in post- stroke rehabilitation.
- Recommend that mood disorders causing persistent distress or worsening disability be managed by, or with the advice of, an experienced clinical psychologist or psychiatrist.

F1.4.1 Pharmacologic Treatment of Post-Stroke Depression

Q1. What pharmacological options are available for treatment of post-stroke depression?

Q2. What evidence is there for tricyclic antidepressants as treatment for PSD?

Q3. What is the Evidence for SSRIs in treatment of Post-Stroke Depression?

Q4. What is the role Selective Noradrenaline Reuptake Inhibitors (NARI) in post-stroke depression?

Q5. What is the role of Serotonin and Noradrenaline Reuptake Inhibitors (SNRIs) in post-stroke depression?

Q6. Discuss the role of psychostimulants for post-stroke depression.

Q7. What is the impact of the pharmacologic treatment of depression on functional recovery post stroke?

F1.4.2 Non-Pharmacologic Treatment of Post-Stroke Depression

Q8. What non-pharmacological treatments are available to treat post-stroke depression?

Q9. Describe each of these treatments and the degree to which they are helpful in post-stroke depression.

F1.4.3 Guidelines for Treatment of Post-Stroke Depression

Q10. What do guidelines say about the treatment of post-stroke depression?

Summarized Guidelines for Use of Antidepressant Medication Following Brain Injury (British Society of Rehabilitation Medicine & the British Geriatric Society 2005).

Assessment

- Recommend informal screening at each assessment point (e.g. ask patient about mood or ask family about behaviours that might suggest depression)
- If depression is suspected, proceed to more formal, detailed assessment (using validated measures, interview and/or observation)

Treatment

- Clinicians should observe patients carefully regarding impact of depression on function, social participation and QOL
- Clinicians should attempt to determine if other, simple, interventions might be appropriate to “boost the patient’s mood”
- Possible risks and contraindications for treatment should be considered carefully along with issues of informed consent and patient/family education
- Antidepressants should be prescribed according to an agreed-upon plan of treatment that includes: baseline assessment using a validated measure, assessment of appropriate baseline biochemical markers, selection of an appropriate agent, clinical review of response to optimize dose (at 2-3 weeks) and repeat assessment at 6 – 8 weeks. Given a positive response to treatment, planned use would extend to 6 months with a procedure for withdrawal at the end of treatment.
- An alternate plan should be in place should treatment with an antidepressant be ineffective.

During Treatment

- Patients should see doctor regularly during treatment (every 2 months) – any clinical deterioration should be investigated – particularly known side effects such as hyponatraemia, seizures, GI bleeding, anti-cholinergic symptoms, sexual dysfunction, sedation, hallucinations, increased confusion, headache
- Antidepressant medication should not be given with repeat prescription and no more than 2 months supply should be written

Referral for Formal Psychiatric Interview

- If depression is severe or resistant to treatment
- Past history of psychiatric disorder and/or use of antidepressant
- Patient shows evidence of suicidal ideation or intent
- Seems that the patient needs to be treated under Mental Health Act 1983 or equivalent (UK)

Withdrawal from Treatment

- At end of treatment (generally 4 – 6 months), there should be a planned period of withdrawal taking place gradually over a period of 1 – 2 months
- Prior to withdrawal, patient mood should be re-evaluated (using same measure as at baseline)
- Patient/family should be warned re: possibility of rebound symptoms. For longer lasting relapse of depression, long-term treatment may be considered. Formal psychiatric advice should be sought.

F1.5 Case Study: Post-Stroke Depression

Case Study

A 78 year old male with a large left hemispheric stroke which has rendered him hemiplegic and suffering from a severe motor (Broca's) aphasia is admitted to the rehabilitation unit. He appears to be depressed. The medical student with you is not surprised that the patient is depressed; after all he has had a devastating stroke and cannot speak. The nurse next to you states that many patients who have a stroke do not necessarily become depressed. They ask you as to whether depression is common post stroke and who is most likely to become depressed.

Q1. How common is depression post-stroke?

Q2. What are the risk factors associated with increased likelihood of depression post stroke?

Case Study (continued)

The nurse states to the medical student that it has been her experience that left hemispheric stroke patients are more often depressed when compared to their right hemispheric counterparts. They ask you if this is supported by the evidence.

Q3. Describe the relationship between PSD and the location of the stroke.

Q4. Describe the negative impacts of Post-Stroke Depression.

Case Study (continued)

The nurse is concerned about depression and asks the physician to assess the patient for depression. The physician does not think the patient is depressed and questions the value of screening assessments for depression in stroke patients.

Q5. What is the consensus on screening/assessment of post-stroke patients for depression?

Case Study (continued)

The social worker is asked to see the patient and administers the Hospital Anxiety and Depression Scale. She reports that the patient high on the depression and anxiety subscales of the HADS.

Q6. Describe the HADS.

Case Study (continued)

The social worker reports that the patient scored high on the HADS for depression. A psychiatrist is consulted and notes that the patient meeting the DSM-IV criteria for a major depression. The psychiatrist recommends pharmacological treatment.

Q7. What pharmacological options are available?

Q8. Describe the mechanism of tricyclic antidepressants.

Q9. Do tricyclic antidepressants improve depression post stroke?

Q10. Describe the mechanism of Selective Serotonin Reuptake Inhibitors (SSRIs).

Q11. Do SSRIs improve depression post stroke?

Case Study (continued)

The nurse asks you whether there are any guidelines for the assessment and management of post-stroke depression.

Q12. What do Guidelines say about the Assessment and Treatment of Post-Stroke Depression?

F2. Social Support and Functional Status

F2.1 Importance of Social Supports

Q1. Describe the role of social support networks on rehabilitation and recovery post stroke.

Q2. Describe those factors which have a positive and a negative impact on quality of life following a stroke.

F2.2 Social Support Interventions Post Stroke

Q1. What evidence is there for social work interventions once the patient is discharged home?

F2.3 Family and Stroke

For the individual, a stroke changes the capacity to function, not only as a physical being, but also as a social one. Resuming successful psychosocial roles is a complex and difficult process. This process is reliant upon instrumental and emotional support that comes primarily from the stroke survivor's family (Palmer and Glass 2003). This transition can be viewed as a process of adaptation as roles, responsibilities and patterns of support within the family change to accommodate the needs of both the stroke survivor and the other members of the family (Palmer and Glass 2003). In viewing the family as a system, it becomes clear that a stroke has a profound effect not only on the individual stroke survivor but also on the entire family system. At present, research has emphasized the effects of re-integrating the stroke survivor into the family on the caregiver-patient dyad.

F2.3.1 Family Caregiving System Post Stroke

Q1. Describe the family caregiving system following a stroke to one of its members.

Q2. Discuss the role of family interactions after a stroke.

F2.3.2 Caregiver Stress and Breakdown

Q3. Describe those factors which contribute to caregiver stress and breakdown post stroke.

Q4. What tasks lead to greater caregiver burden?

Q5. Describe how the impact of caring for a stroke survivor changes over time.

Q6. Describe the role of social contact and activity in caregiver coping.

Q7. How common are personality disorders post stroke?

F2.3.3 Depression in Caregivers Post Stroke

Q8. How common is depression among caregivers post stroke? Who is more likely to become depressed?

F2.3.4 Summary of Caregiving Post Stroke

Q9. Summarize the effects of caregiving post stroke.

F2.4 Family Interventions

F2.4.1 The Family Caregiver and Social Support Interventions

Interventions designed to improve the social function and support networks may have beneficial effects on the risk for depression as well as increasing the social activity and improving life satisfaction of the caregiver. In their 1998 review of interventions with families post stroke, Korner-Bitensky et al. concluded that helping caregivers to maintain social and leisure activity may result in improved caregiver wellbeing.

Q1. What social support interventions have been shown to help caregivers?

F2.4.2 Information Provision and Family Education

Q2. What is the benefit of providing stroke patients and their families with information and education?

Q3. What type of information is helpful and how is it best delivered?

F2.4.3 Perceived Needs for Information, Education and Training

Q4. Do stroke patients and their families receive adequate information or teaching?

References

Korner-Bitensky N, Tarasuk J, Nelles J, Bouchard JM. The impact of interventions with families poststroke: a review. Top Stroke Rehabil 1998;5:69-85.

Palmer S, Glass TA. Family function and stroke recovery: A review. Rehabilitation Psychology 2003;48:255-265.

F3. Sexuality

In 1975, the World Health Organization acknowledged the importance of sexual health, which it defined as “*the integration of the somatic, emotional, intellectual and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication and love.*” In a study of individuals aged 50 – 92, Gott et al. (2003) reported that among this group of older individuals, sex remained an important element of a close emotional relationship (Gott et al. 2003). However, sex may be assigned a lower priority, not due to aging per se, but rather due to an increasing prevalence of disability or health problems that create a barrier to sexual activity (Gott et al. 2003). Sexual dysfunction after stroke has been reported to be a problem that has a significant impact on the wellbeing of stroke patients. However, it is an issue that is often underestimated or simply ignored during rehabilitation despite its importance to stroke survivors (Buzzelli et al. 1997; Murray and Harrison 2004).

F3.1 Decreased Sexuality Following Stroke

Q1. Describe reasons for decreased sexual activity following a stroke.

References

Buzzelli S, de Francesco L, Giaquinto S, Nolfe G. Psychological and medical aspects of sexuality following stroke. Sexuality and Disability 1997;15:261-270.

Gott M, Hinchliff S. How important is sex in later life? The views of older people. Soc Sci Med 2003;56:1617-1628.

Murray CD, Harrison B. The meaning and experience of being a stroke survivor: an interpretative phenomenological analysis. Disabil Rehabil 2004;26:808-816.

F4. Driving

F4.1 The Importance of Driving to Stroke Survivors

Q1. How important is driving to stroke survivors?

Q2. How might a stroke compromise driving ability?

F4.2 The Assessment of Driving Post Stroke

Q3. What assessment tools are available to assess a stroke survivor's fitness to drive?

Q4. Are stroke survivors' good accurate judges of their own ability to drive?

Q5. When the stroke patient does return to driving what situations would you advise them to avoid?

F4.3 Interventions to Improve Driving Post Stroke

Q6. What is the evidence for treatment interventions in patients not able to drive?

Case Study

A 63-year old gentleman presented with a moderate-sized right middle cerebral artery infarct involving the anterior parietal and temporal regions. He was admitted to rehab 7 days after having suffered his infarct which is as result of occlusion of the internal

carotid artery. On initial testing he has evidence of a significant left hemiparesis. He is a Chedoke McMaster Scale 2 in the arm, 2 in the hand, 3 in the leg and 2 in the foot.

He responds well to 6 weeks of rehabilitation. Near the time of discharge his motor function has improved. His leg is now a 5/7 and his foot 4/7. His arm is 4 and his hand is 3. His MVPT testing near the time of discharge is 29 and it took him 12 seconds to complete. Therapists report that he still has a tendency to bump into the door jams on the left side but this has improved dramatically. There are no visual field deficits.

Just prior to discharge this gentleman informs you that he wishes to drive and asks you if that is a possibility.

Q7. Describe your management of this case with regard to driving.

F5. Returning to Work Post Stroke

Q1. *What approach would you take with getting stroke survivors back to work?*

References

Buzzelli S, de Francesco L, Giaquinto S, Nolfi G. Psychological and medical aspects of sexuality following stroke. *Sexuality and Disability* 1997;15:261-270.

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Palmer S, Glass TA. Family function and stroke recovery: A review. *Rehabilitation Psychology* 2003;48:255-265.