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Optimising Epilepsy Care to Enhance Patient Quality of Life

Mitigating treatment-related adverse effects, managing comorbidities, and integrating mental health care

People with epilepsy (PwE) are at a risk of reduced quality of life (QoL)[1]

- Impaired daily functioning due to recurrent seizures
- Adverse effects associated with anti-seizure medications (ASMs)

Some PwE may justifiably reject seizure-eliminating treatments[2]

Mismatch in perspectives: Patients may prefer to maintain their condition, while clinicians aim to eliminate seizures[2]

Clinicians may contribute to overtreatment by[2]:

- Presenting seizure elimination as the only option
- Pressurising the patient
- Undermining patient confidence in their own judgment
- Overwhelming the patient

Overtreatment may further compromise QoL[1]

- Increased toxicity burden
- Worsening of existing comorbidities

Optimising epilepsy management is critical to enhance QoL in PwE

Physicians should re-evaluate the balance between seizure control and medication-related toxicity

Reducing overtreatment should involve assessing side effects

It is crucial to implement educational or supportive measures to optimise patient care

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Optimisation of epilepsy management

Incorporating patient perspectives is essential to achieve an optimal balance between:

- Therapeutic benefits
- Adverse effects and potential reductions in QoL
- Risks associated with comorbidities

Managing sleep-wake-related comorbidities[3]

Sleep plays a vital restorative role, and its disruption creates a vicious cycle with epilepsy

Seizures during wakefulness in temporal lobe epilepsy is associated with:

- Lower sleep efficiency
- Higher drowsiness
- Greater intensity/duration of sleep-related seizures

Management of sleep-wake disorders in PwE

Diagnosis

- Collect the patient's medical history
- Assess risk factors
- Use diagnostic scales for identifying sleep disorders

Management strategies after confirmed diagnosis

- Individualised treatment plan to minimise side effects of treatment
- Deep brain stimulation therapy
- Epilepsy surgery
- Vagus nerve stimulation therapy

Managing sleep-related symptoms in PwE needs a personalised approach based on individual factors and preferences[3]

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Cardiovascular diseases[3]

60–80%
PwE report cardiovascular comorbidities

2–3x
Higher risk of pre-mature death in PwE

15%
Pre-mature deaths due to sudden cardiac death (SCD)

Management of cardiovascular comorbidities in PwE[3]

Diagnosis

- Assess SCD risk and cardiac arrhythmias
- Identify potential cause: epileptic disorder/acute seizure activity/ASM
- Assess medical history
- 12-lead electrocardiography

Management strategies after confirmed diagnosis

- Cardiac pacemaker (ictal bradyarrhythmia)
- Defibrillator (ictal/postictal ventricular tachycardia or fibrillation)
- Discontinuation of enzyme-inducing ASMs
- Discontinuation of high-dose sodium channel blockers

The risk of SCD in PwE is about three times higher than in the general population, underscoring the need for focused research to reduce this risk

Cognitive dysfunction[3]

Long-term use of ASM polypharmacy

Associated with:

Cognitive functioning

70%
PwE (newly diagnosed or new-onset epilepsy) have cognitive deficit

Management of cognitive dysfunction in PwE[3]

Diagnosis

- Clinical history of the patient
- Neuropsychological evaluation
- Assessment of risk factors and neuropathologies
- Magnetic resonance imaging to assess secondary hippocampal sclerosis

Management strategies after confirmed diagnosis

Ensure epilepsy treatment does not impact the cognitive and daily functioning of patients

Conduct periodical cognitive assessments

Conduct EpiTrack evaluation to track cognitive side effects of ASMs

Timely identification and intervention can help avoid negative impact on cognitive abilities and educational development

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Depression[3]

Individuals with controlled epilepsy report depressive symptoms

Individuals with drug-resistant epilepsy report depressive symptoms

Management of depression in PwE[3]

Screening

- Evaluation of depressive episodes and suicide risk
- Evaluation of seizure severity and frequency
- Assessment of recent treatment changes: ASMs or anti-depressive treatment
- Assessment of family history for psychiatric illnesses

Management strategies for "mild" depression[3]

- Pharmacologic therapy (selective serotonin reuptake inhibitors)
- Supportive therapy (psychotherapy, exercise, and cognitive-behavioural therapy)

Management strategies for "moderate or major" depression[3]

- Pharmacologic therapy (selective serotonin reuptake inhibitors)
- Supportive therapy (psychotherapy, exercise, and cognitive-behavioural therapy)
- Switch to alternative drugs or add mirtazapine to selective serotonin reuptake inhibitors

Integrated mental health care for PwE[4]

Mental health screening +

Psychoeducation +

Optimised seizure care

Benefits of mental health screening[4]

- Increased detection of psychiatric disorders
- Improved mental health care
- Sufficient acceptability among PwE

Digital technologies for assisted screening and automatic scoring further improve mental health care in PwE

Key message

Effective epilepsy management demands a multidisciplinary approach that addresses both seizures and associated comorbidities to optimise patient outcomes

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