Depression and Anxiety in Palliative Medicine

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Overview

Depression

- Definition
- Diagnosis
- Distinguishing depression from sadness
- Explanation
- Management

Anxiety

- Definition
- Symtpoms
- Causes
- Management

Depression

Depression definition

Depression is a common mental disorder that presents with low mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. It affects a person's physical functions and social interactions

World health organisation

Depression

- Occurs in 5–15% with advanced cancer
- A further 10–15% describe depressive symptoms
- Important to identify

- Exact cause is unknown
  - Monoamine theory – depression results from a decrease in brain concentrations of noradrenaline and serotonin

Reasons for missed diagnosis

Why might the diagnosis of depression be missed in the palliative group of patients?

Reasons for missed diagnosis

- Low mood may be seen as ‘reactive’ or ‘understandable’ in this group
- May be diurnal variation
- Social skills may mask low mood
- May be masked by concurrent anxiety
- May be expressed via physical symptoms

Risk factors for depression

Think about some of the risk factors which put people at higher risk of developing depression

Risk factors for depression

Pyschosocial

- Previous depression
- Obsessional personality
- Inability to express emotions
- Lack of supportive relationship
- Loss of independence
- Recent bereavement

Physiological

- Unrelieved pain
- Drugs
- Biochemical
- Endocrine
- Vitamin deficiency
- Cerebral eg stroke, cerebral tumour, MS, epilepsy, head injury

Diagnosing depression

How is depression diagnosed?

What features / behaviour would make you suspect a diagnosis of depression in a patient you were caring for?

Diagnosing depression

- At least 5 of the following symptoms must be present including one or both of the 1st two
  - **Depressed mood**
  - **Diminished interest or pleasure in most activities**
  - Significant weight gain or loss
  - Insomnia or hypersomnia
  - Psychomotor agitation or retardation
  - Indecisiveness/ poor concentration
  - Lack of energy
  - Feelings of guilt and worthlessness
  - Suicidal ideas

Screening tools

- HAD scale - ?validity in patients with advanced cancer
- Edinburgh depression scale (postnatal women) – more reliable (Cox et al, 1987)
- ‘Are you depressed?’ – shown to be a reliable and sensitive screening question (Chochinov H et al, 1997)

Diagnostic challenges

- Diagnosing depression is difficult in the presence of a debilitating illness
- Somatic symptoms of depression may overlap with those of cancer
  - Anorexia
  - Weight loss
  - Constipation
  - Sleep disturbance
  - Loss of libido

Differential diagnosis

- Adjustment reaction
- Demoralised
- Sadness
- Grief

Distinguishing depression and sadness

Which features are more typical of depression as opposed to general sadness?

Distinguishing depression and sadness

Both

- Loss of interest
- ↓ concentration
- Tearfulness
- Anxiety
- Poor sleep
- Tiredness
- Anorexia
- Suicidal ideas

Depressive Features

- Loss of emotion and pleasure
- Social withdrawal
- Irritability
- Physical anxiety
- Hopelessness and worthlessness
- Excessive guilt
- Requests for euthanasia
- Intractable pain
- Suicide attempts

Explanation

- Depend on the patients physical and psychological state
- Patients often helped by being told that depression is not shameful
- eg *'it seems to me that you've developed a depressive illness….Being physically ill is hard work and emotionally exhausting. Ongoing stress reduces certain chemicals in the brain and this results in depression… Antidepressants are tablets which help the brain replenish these chemicals'.*

Management - 1

Correct the correctable

- Prescribe specific treatment for medical causes

Management - 2

Non drug treatment

- Explanation and assurance that symptoms can be treated
- Consider day care centre
- Psychological treatments may benefit
- Other psychosocial professionals eg chaplain, creative therapists
- BEWARE overwhelming pt with multiple referrals

Management - 3

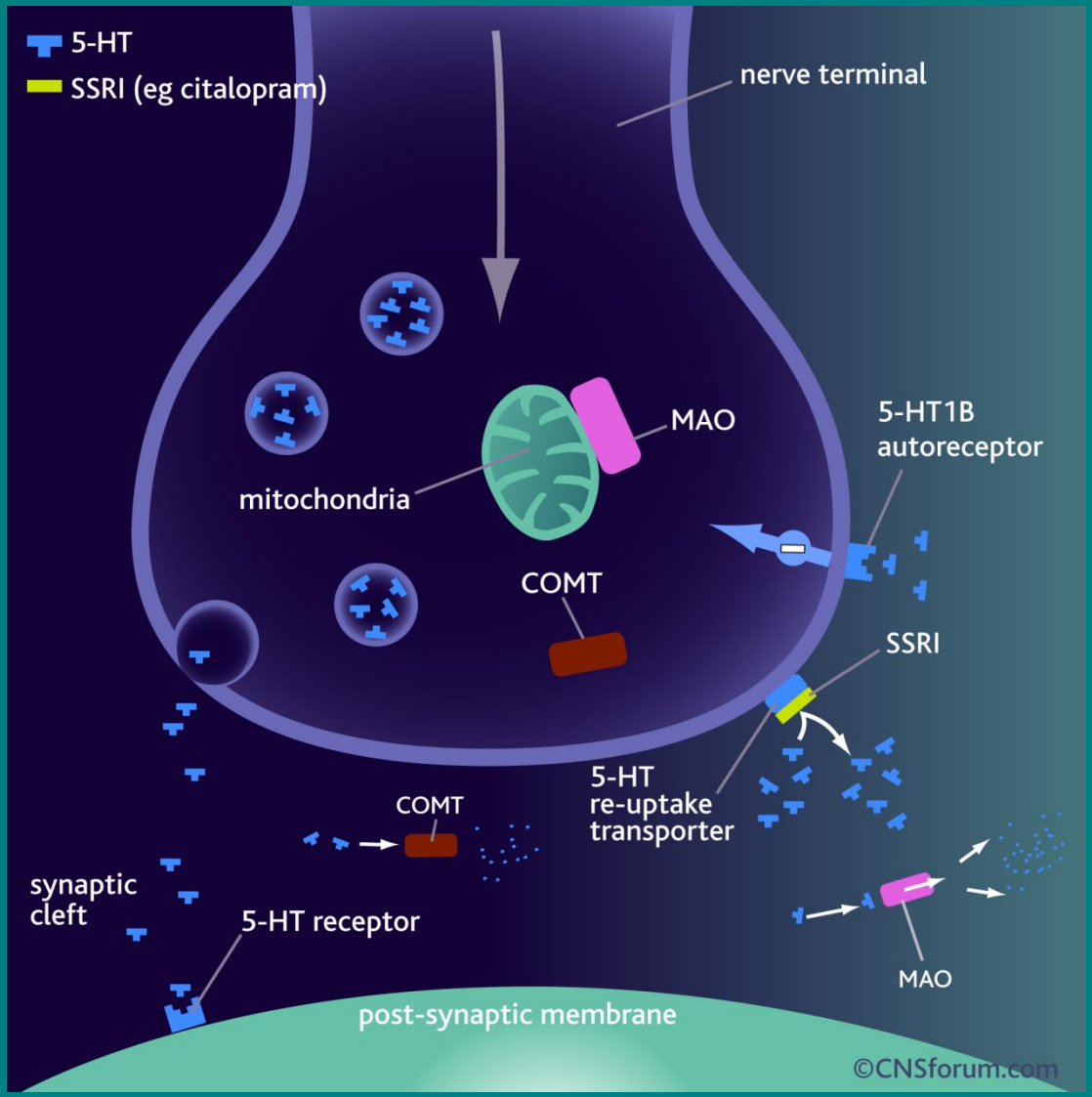
Drug treatment

- Choice of antidepressant depends on adverse effects and patients symptoms
- The initial and continuing doses – generally lower in debilitated patients
- Often interval of 2-4 weeks before evidence of benefit
- Avoid abrupt cessation
- Be aware of interactions with other medication

Management – 4
Commonly used antidepressants

Selective serotonin reuptake inhibitors – selectively inhibit the reuptake of serotonin (5HT)

- E.g. citalopram, paroxetine, sertraline
- Side effects: GI disturbance, less sedating. Fewer antimuscarinic and cardiotoxic se compared to TCAs


5-HT
SSRI (eg citalopram)
nerve terminal
MAO
5-HT1B
autoreceptor
mitochondria
COMT
SSRI
5-HT
re-uptake
transporter
COMT
synaptic
cleft
5-HT receptor
MAO
post-synaptic membrane
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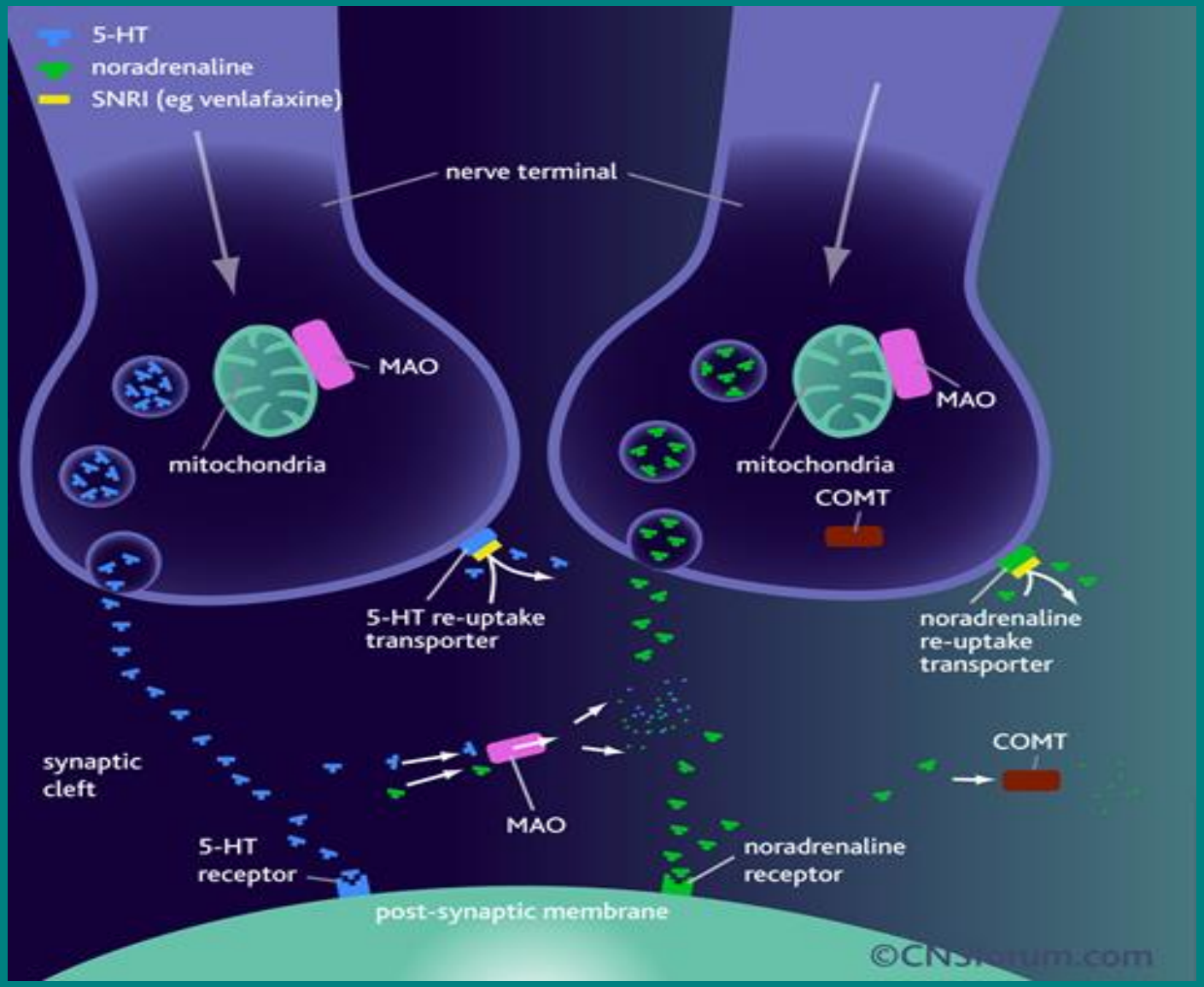
Management – 5
Commonly used antidepressants

Serotonin noradrenaline reuptake inhibitors (SNRI)

- E.g. venlafaxine, duloxetine
- Block proteins in the pre synaptic neuron that re-uptake serotonin and noradrenaline
- This increases concentration in synaptic cleft and therefore brain


5-HT
noradrenaline
SNRI (eg venlafaxine)
nerve terminal
MAO
mitochondria
MAO
mitochondria
COMT
5-HT re-uptake transporter
noradrenaline re-uptake transporter
synaptic cleft
MAO
COMT
5-HT receptor
noradrenaline receptor
post-synaptic membrane
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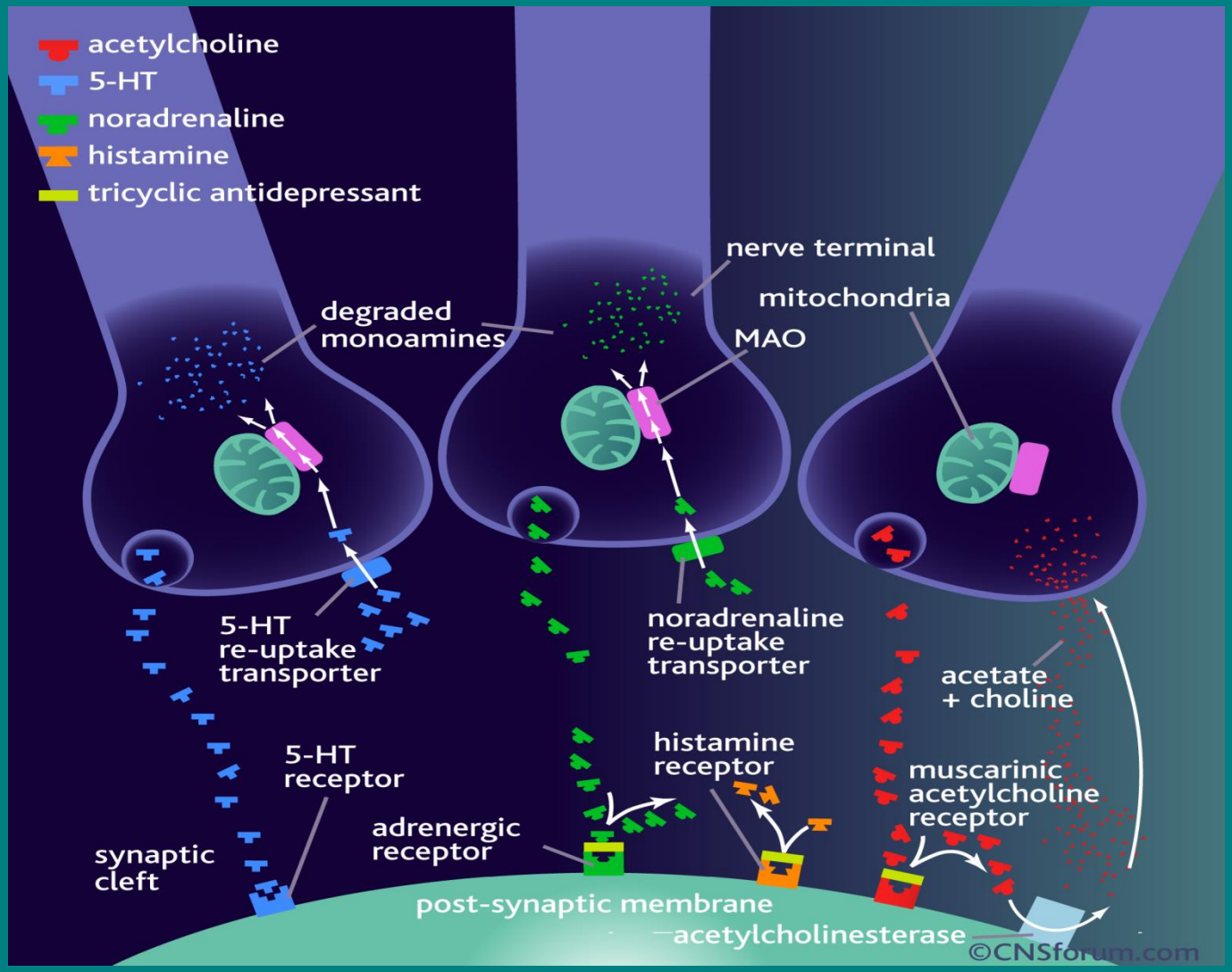
Management – 6
Commonly used antidepressants

Tricyclic antidepressants – block reuptake of serotonin (5HT) and noradrenaline. Also block muscarinic, H1 and α1 receptors

- eg amitriptyline, dosulepin, imipramine
- Side effects: dry mouth, sedation, blurred vision, postural hypotension, arrythmias
- Can be useful for neuropathic pain
- More likely to be discontinued due to side effects
- Toxic in overdose


acetylcholine
5-HT
noradrenaline
histamine
tricyclic antidepressant
nerve terminal
mitochondria
degraded monoamines
MAO
5-HT re-uptake transporter
noradrenaline re-uptake transporter
acetate + choline
histamine receptor
5-HT receptor
muscarinic acetylcholine receptor
adrenergic receptor
synaptic cleft
post-synaptic membrane
acetylcholinesterase
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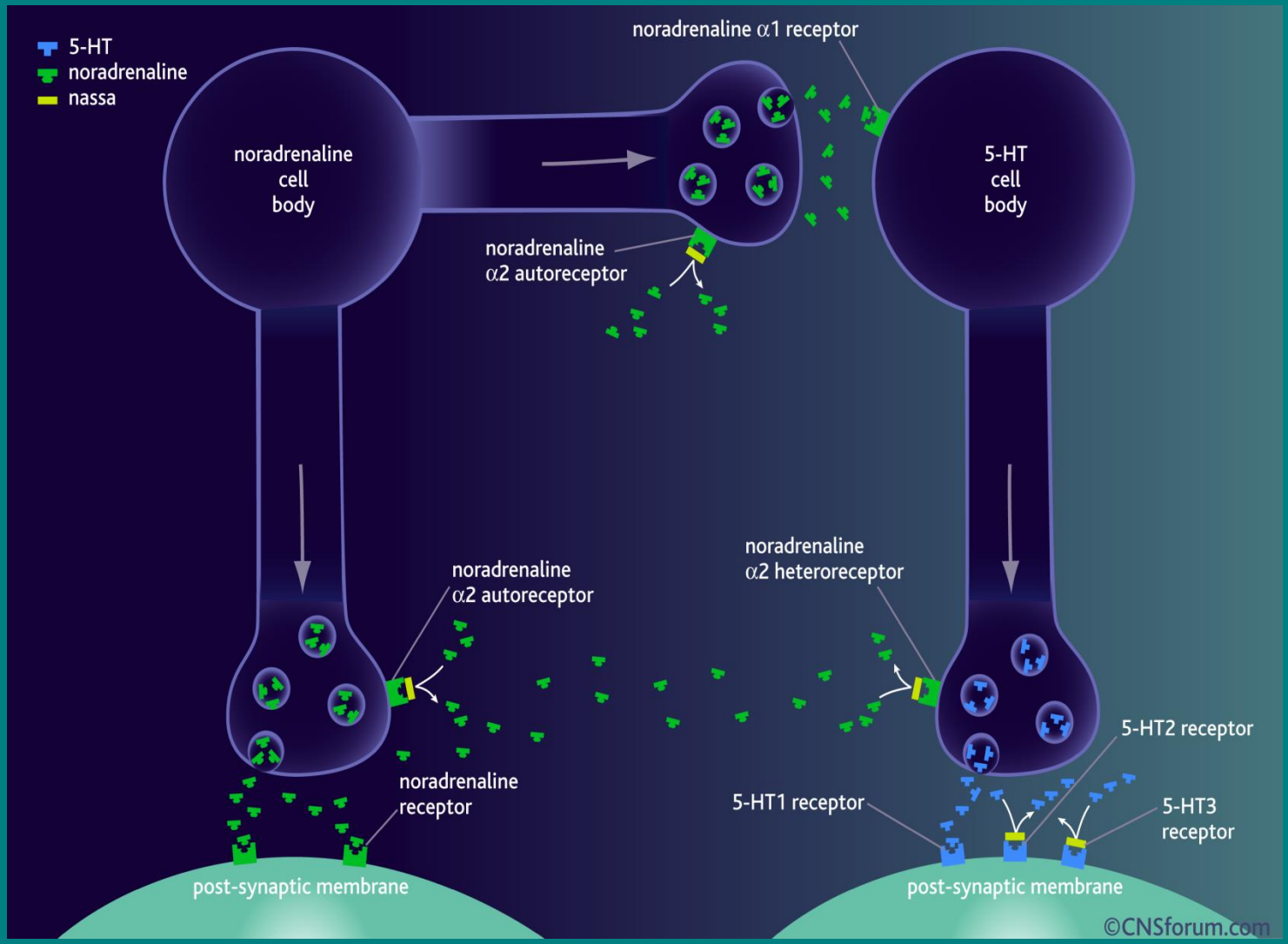
Management – 7
Commonly used antidepressants

Noradrenergic and specific serotoninergic antidepressant, NaSSA

- E.g. mirtazepine
- Side effects: increased appetite, weight gain, sedation (? beneficial)
- Fewer anti-muscarinic side effects but more expensive than amitriptyline
- Good choice if marked anxiety/agitation


5-HT
noradrenaline
nassa
noradrenaline α1 receptor
noradrenaline cell body
5-HT cell body
noradrenaline α2 autoreceptor
noradrenaline α2 autoreceptor
noradrenaline α2 heteroreceptor
5-HT2 receptor
noradrenaline receptor
5-HT1 receptor
5-HT3 receptor
post-synaptic membrane
post-synaptic membrane
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Anxiety

Anxiety definitions

- Anxiety is an unpleasant emotional experience which may be acute (transient) or chronic (persistent). It varies in intensity and can cause poor sleep, frightening dreams, and a reluctance to be left alone

Twycross R et al

- Anxiety is a state of intense apprehension, uncertainty, and fear resulting from the anticipation of a threatening event or situation, often to a degree that normal physical and psychological functioning is disrupted

Stedman's Medical Dictionary

Symptoms of anxiety

What are some of the symptoms you may see in a patient suffering from anxiety?

Symptoms of anxiety

- Persistently tense and unable to relax
- Worry
- Cannot distract self or be distracted
- Poor concentration
- Indecisiveness
- Insomnia
- Irritability
- Sweating, tremor, nausea
- Panic attacks
- Severe anxiety: may inc. palpitations, breathlessness, dry mouth, dysphagia, anorexia, nausea, diarrhoea, dizziness, sweating, tremor, headache, weakness

Causes of heightened anxiety

What factors may cause heightened anxiety in patients with advanced cancer?

(it might help to break this down into situational, organic, psychiatric, drugs)

Causes of heightened anxiety

Situational

- Adjustment reaction
- Fear of hospital, chemo, radiotherapy
- Worry re family, money

Organic

- Severe pain
- Insomnia
- Weakness
- Nausea
- Breathlessness
- Brain tumour

Psychiatric

Drugs

- Corticosteroids
- Drug induced hallucinations eg benzodiazapines, opiods
- Withdrawal from eg benzodiazapines, antidepressants, alcohol

Other

- Wasted opportunities, guilt
- Worry re future eg pain, mental impairment, loss of independence
- Thoughts about after death

Evaluation

- Detailed evaluation assessment very important
- Family may provide useful background information
- Review medication eg corticosteroid, SSRI recently started?

Management - 1

Correct the correctable

- Relieve pain and distressing symptoms
- Encourage sharing of worries and fears
- Correct misconceptions
- Develop a strategy for coping with uncertainty

Management - 2

Non drug management

- Anxiety management training
- CBT
- Music therapy
- Art therapy
- Hypnotherapy
- Brief psychotherapy
- Relaxation therapy

Management - 3

Drug treatment

- Benzodiazepine e.g. temazepam 10-40mg nocte, diazepam 5-10mg nocte, lorazepam 500microg PRN
- Antidepressant esp. if anxiety-depression or panic attacks
- Antipsychotics if psychotic features, associated delirium or benzodiazepines are aggravating the situation
- ß adrenoceptor blockers e.g. propranolol. Effective in alleviating autonomic symptoms of anxiety (tremor, palpitations, sweating)

Management - 4 Benzodiazepines

- Anxiolytic, hypnotic, muscle relaxant and anticonvulsant actions
- Caused by enhancement of GABA mediated inhibition in the CNS
- Chronic treatment may cause cognitive impairment, tolerance and dependence
- Metabolized in the liver to active metabolites
- Different benzodiazepines have different half lives which affects choice depending on situation
- Side effects: drowsiness, agitation, ataxia
- Withdrawal may occur on stopping – nausea, anxiety, depression, insomnia

Any Questions?

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