• When psychiatric symptoms reflect medical conditions

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The title is awkward, but dualism is worse!

Mental illness is a metaphor. Minds can be ‘sick’ only in the sense that jokes are ‘sick’ or economies are ‘sick.’

Johnstone E. C. et al. (1976) Cerebral ventricular size and cognitive impairment in chronic schizophrenia Lancet 2:924-926
Syndromal diagnoses and associated risk

Crude exogenous organic damage of the most varying kind can produce acute psychotic clinical pictures of a basically uniform kind.

Karl Bonhoeffer, 1909

Focus: Presentations of agitation, emotional disturbance or psychosis *not* somatic symptom disorder/FND

**Basic approach:**
- Is the patient delirious?
- Have they had basic screening?
- Does it ‘fit’ with a psychiatric presentation?
- Are there ‘red flags’?
- Could it be one of the classic ‘psychiatric disorder mimics’?
- What are the care needs of the patient?
1. Exclude delirium

- Hyperactive: schizophrenia, mania
- Hypoactive: depression
- Abrupt onset, altered conscious level, inattention, fluctuating course, circadian rhythm disturbance, visual hallucinations
- Psychiatric conditions: preserved recent memory and (gross) attention, orientated
2. Adequate history, examination, basic lab screening

- Clarify symptoms and onset
- **Collateral** history
  - reluctant to reveal: guarded in psychosis
  - symptoms unaware of
- Physical, neurological, mental state and **cognitive** exam
- Standard screening

**Routine screening**

- FBC
- U&Es
- Calcium, phosphate
- LFTs (including GGT)
- TFTs
- ESR
- Glucose
- Urine dipstick, C&S
- Drug screen
- BP, pulse, temperature
- B12 and folate
- [Chest X-ray if respiratory symptoms]
3. Does presentation ‘fit’ with a psychiatric disorder?

- Gradual onset
- Expected demographics (onset 15-30)
- Recurring or relapsing/remitting
- Grossly preserved cognition
- Characteristic psychopathology
- Consistency in dominant symptoms
- The psychiatrist’s ‘gut feeling’

Typical presentations of psychiatric disorders
Schizophrenia

- Insidious onset
- Typically late adolescence/early adulthood
- Orientated, preserved recent memory
- Normal(ish) attention
- Thought disorder, but individual sentences coherent
- Consistent, systematised persecutory delusions
- Auditory not visual hallucinations
- Actions understandable(ish) given beliefs
Mania

- Bipolar Affective Disorder; typical onset adolescence/early adulthood
- Elevated, irritable mood
- Grandiose thinking, stable delusions, auditory hallucinations
- Pressured, ‘flight of ideas’ rather than ‘confused’
- Goal directed behaviour
- Distractible but orientated
- Sleep disturbance
- Onset can be subacute
- Been ‘latent’, unipolar for decades
- ‘Late onset’ bipolar: irritability, vascular disease

Hahn C J Geriatric Psychiatry and Neurology 2014, 27: 56-62
- ‘Mixed affective state’, ‘manic delirium’
Depression

- Gradual onset
- First episode can be older
- Guilt, hopelessness, suicidality
- Worse morning rather than night
- ‘Don’t know’, preserved(ish) attention/concentration
- Nihilistic delusions rather visual hallucinations
- Agitated depression/mixed affective state and severe retardation/catatonia
Personality disorder

- Personality change as presenting feature of neurological disease
- Enduring patterns of behaviour
- Agitation/aggression precipitated by being thwarted
- Absence major psychopathology
- Prone to dissociation and stress-induced quasi-psychotic symptoms

**Emotionally Unstable or ‘Borderline’**

- Irritability, rejection sensitivity
- Demand specific conditions or practitioners
- Agitation when interpersonal conflict/expectations not met
- High propensity suicidal acts
- Dissociative states when under stress
4. Are there any ‘red flags’?

- Mode of onset
- Wrong demographics
- Wrong symptoms
  - visual hallucinations
  - fleeting, changeable delusions
- Additional evidence brain dysfunction
  - seizures
  - motor, sensory, language dysfunction
  - cognitive deficits
- Abnormal examination/obs/lab work up
  e.g. autonomic instability, pyrexia
  - can they be explained?
Additional investigations

- Structural imaging
- HIV and syphilis serology
- Caeruloplasmin; examine for Kayser–Fleischer rings
- Thyroid peroxidase Ab
- ANA, [RF, anti-SSA, anti-SSB, p-ANCA and c-ANCA]
- EEG: not just to identify epilepsy, encephalopathy
  
  Van Der Kooi Arendina W et al. CHEST J 2015; 147: 94 – 101

- LP and CSF examination
- Dopamine transporter scan
- Functional imaging
- Synacthen test
- Genetic testing for Huntington's
- Multiple sleep latency test; HLA typing; CSF hypocretin levels

- Ab for limbic encephalitis or genetic testing for FND/MND
5. Classic psychiatric disorder ‘mimics’

- Substance intoxication/withdrawal
- Lewy-body dementia
- Huntington’s disease
- Hydrocephalus
- Limbic encephalitis
- Dementia, especially FTD

But was diagnosis ‘wrong’?
Depressive prodrome to PD
Anxiety or FNS in developing FTD
Two ‘novel’ psychiatric disorder ‘mimics’
Limbic encephalitis

- Ab to neuronal surface ion channels or receptors
- Movement disorder, seizures, prominent cognitive impairment, autonomic disturbance or treatment resistance
- Anxiety and psychosis: psychiatry
- Ab present in ‘typical’ presentations of first episode psychosis
- 3% NMDA serum positive vs. no controls Others did not differ
- CSF more sensitive than serum for NMDA Ab (15% serum negative)
- and more specific for LGI1
Antibodies associated with psychiatric presentations

<table>
<thead>
<tr>
<th>Antibody</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>NMDA (ovarian teratoma)</td>
<td>Females&lt;br&gt;Irritability, anxiety, insomnia&lt;br&gt;Paranoia, delusions, hallucinations&lt;br&gt;Speech dysfunction, orofacial dyskinesias, memory deficits, autonomic instability&lt;br&gt;Decreased consciousness&lt;br&gt;Seizures at any point</td>
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<tr>
<td>VGKC [LGI1, CAsPR2] (thymoma, SCLC)</td>
<td>Sleep disturbance&lt;br&gt;Amnesia and confusion&lt;br&gt;Seizures, movement disorders (esp. faciobrachial dystonic seizures)&lt;br&gt;Hyponatraemia</td>
</tr>
<tr>
<td>AMPA (SLC)</td>
<td>Sleep disturbance, hallucinations, amnesia, confabulation</td>
</tr>
<tr>
<td>GABAB (SCLC)</td>
<td>Confusion, psychosis, sleep disturbance</td>
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Frontotemporal dementia

Psychosis most common in C9orf72 and GRN mutations
- disinhibition/hyperorality/apathy/personality change (bvFTD)
- impaired ‘executive’ tests (bvFTD)
- naming difficulties, poor category fluency (SD)
- focal frontal/ATL atrophy
- muscle atrophy/weakness (MND)

C9orf72: OCD and psychosis

This is the wrong place for them!!

- Crucial to treat underlying disorder
- Crucial patient is kept safe
- Psychiatric input can help with risk management, environmental and pharmacological interventions
- Collaboration and imaginative working between general medical/neurology/psychiatric services
Summary

Psychiatric symptoms are generally non-specific but disorders often have a characteristic presentation.

There are not diagnostic tests.

Correct diagnosis depends on vigilance to key features and exclusion of other possibilities.

Interdisciplinary working and good communication are central to this.

Presentations evolve: keep an open mind and be prepared to reassess/reinvestigate.

We normally get it fairly right!
When psychiatric symptoms reflect medical conditions

Authors: Killian A Welch and Alan J Carson

The brain dysfunction associated with certain medical and neurological conditions can produce essentially any psychiatric symptom. This means there is always a chance that presentations thought to be 'psychiatric' are actually explained by unidentified medical pathology. This paper aims to outline an approach to minimise these missed diagnoses.

condition goes untreated. Data on the frequency with which this occurs are limited, but Johnson's case series reporting that 12% of consecutive psychiatric admissions had some (previously unidentified) physical illness that was judged to be aetologically important to the presentation remains a salutary lesson.\textsuperscript{3} In the absence of reliable data, we feel that it reasonable to refer to clinical experience, which suggests that the following are crucial in preventing the erroneous attribution of symptoms to psychiatric etiology.