

# Essential assessments and investigations in first episode psychosis: a survey of psychiatrists

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## Introduction

- Psychosis is classically characterised by a loss of contact with reality consisting of delusions, hallucinations, and disorganised speech and behaviour.
- The underlying cause of an episode of psychosis can be classified as either a primary psychiatric disorder such as schizophrenia, or secondary to an organic cause such as a viral encephalitis.
- Unfortunately, there is not yet any international consensus on essential investigations in a first episode of psychosis, nor consensus regarding which features may serve as red flags for an underlying organic cause.

## Methods

- An online survey was designed using Qualtrics and sent out to specialist registrar grade psychiatrists at South London and Maudsley (SLaM) NHS Foundation Trust in March - April 2020.
- Clinicians rated the importance of various investigations for first episode psychosis. They also rated the importance of clinical features in screening for organic causes of psychosis.
- For both tasks, responders rated each feature or investigation on a five-point Likert scale from 1 (essential) to 5 (should not be performed / included). Mean response index for each item was calculated to rank the investigations and features in order of importance when screening for an organic cause in a first episode of psychosis.

Investigation	Mean response index
Neurological Exam	1.1
Full Blood Count	1.1
Urea & Electrolytes	1.1
Liver Function	1.2
Inflammatory Markers	1.2
General Physical Exam	1.3
Calcium	1.3
Thyroid Function	1.3
Lipid Profile	1.5
HIV	1.5

Figure 1: Ten most important investigations for first episode psychosis as rated by 20 specialist registrar psychiatrists, with colour shading indicative of number of individuals rating the investigation as "essential"

## Results

- 20 psychiatry specialist registrar doctors completed the survey.
- Participants came from a variety of psychiatric subspecialties with 10 from general adult psychiatry, 6 from neuropsychiatry / liaison psychiatry, 3 from old age psychiatry and 1 from medical psychotherapy.

Feature	Mean response index
Altered Consciousness	1.1
Cancer	1.1
Neurological disorder	1.1
Brain Injury (Recent or History of)	1.1
Delirium (Acute Confusion)	1.1
Focal Neurological Sign	1.1
Immune Deficiency	1.2
Unexplained Weakness	1.2
Signs of Infection	1.2
Abnormal Movements (Non-Drug Side Effects)	1.2

Figure 2: Ten most important features indicating organic cause of psychosis as rated by 20 specialist registrar psychiatrists, with colour shading indicative of number of individuals rating the investigation as "essential"

## Results (continued)

- All respondents felt that patients with first episode psychosis should undergo a routine set of investigations. Investigation modalities that were felt to be important when investigating first episode psychosis included examination (1.1), bloods tests (1.1), and ECG (1.1).
- The highest ranked investigations were neurological exam, full blood count, urea and electrolytes, liver function tests, inflammatory markers (e.g. CRP), general physical exam (e.g. cardiovascular exam, respiratory exam), calcium, thyroid function, lipid profile and HIV serology (Figure 1).
- All trainees agreed that information collected on initial assessment were informative in screening for organic causes of psychosis.
- The highest ranked clinical features were altered consciousness, cancer, neurological disorder, brain injury (recent or history of), delirium, focal neurology, immune deficiency, unexplained weakness, signs of infection and abnormal movements (non-drug side effects) (Figure 2).

## Conclusions

- Among a group of 20 UK psychiatrists there was consensus that screening for organic causes in a patient presenting with psychosis is essential.
- There was agreement that routine investigations should be performed in all patients, with neurological exam and blood tests for full blood count and urea and electrolytes deemed most essential.
- In addition, altered consciousness, delirium, focal neurology, history of cancer, neurological disorder and brain injury were considered essential features when screening for organic causes in a first episode of psychosis.