Symptoms and signs of prodrome in psychosis

In the first of a three-part series on psychosis, Nicolas Ramperti looks at how to identify and manage psychotic prodrome.

Psychosis is an illness that affects approximately 75,000 people in Ireland. Schizophrenia, the most common type of psychosis, has a lifetime risk of 1%. Despite its low incidence, surveys at a national level confirm that 27% of GPs in this country have more than 10 cases of schizophrenia under their care. Furthermore, 71% of GPs see three to five suspected cases of psychosis each year.

One of the main issues faced by GPs is how to correctly identify and manage those patients who may be exhibiting early symptoms and signs of psychosis. Over the past fifteen years there has been an increased interest in the early detection of psychosis. More recently this interest has focused on the prodromal or prepsychotic stages.

What is psychosis?

Psychosis is a general term to describe a group of illnesses characterised by the presence of a certain type of symptoms, most commonly delusions and hallucinations. Classically, psychotic symptoms have been broadly classified into positive and negative symptoms. Positive symptoms (described as such because they ‘add’ an unusual/abnormal experience) include: delusions; hallucinations; formal thought disorder (disorganised thinking); and bizarre behaviour. Negative symptoms (those that ‘take away’ an experience and are easily confused with depression) are: affective blunting; impoverished thinking; apathy; and asociality.

While the symptoms described above could be easily (at times) identified in cases of established psychosis, there is a small number of patients that may present to their GP, or the psychiatric outpatient department, with sub-threshold or non-specific symptomatology.

Prodrome in psychosis

Psychosis does not always present as a fully blown syndrome. The illness may still be in the process of being developed when a patient arrives to our clinic, providing us with a very unspecific picture. This is similar to other medical conditions, for example, a rash in a child. In this case, it may take a number of days for the diagnosis to become clearer; unfortunately, in the case of psychosis, it could take months or years. Prodrome is a term to describe a period of prepsychotic disturbance (Greek, prodrómos: forerunner of an event). It is sometimes also referred to as ‘at risk mental state’ (ARMS). While there is a clear deviation from the individual’s previous personality and behaviour, none of the symptoms exhibited reach the threshold for psychosis.

The most common symptoms of psychotic prodrome are:

- Suspiciousness – where the patient is not convinced about their persecution but ‘feels that something might be happening’
- Unusual thought content, not in keeping with previous personality
- Fleeting or simple auditory hallucinations – hearing a single word or one’s name being called; the patient realises that there is no explanation for the sound
- Sleep disturbance – insomnia or day-night sleep reversal
- Depressed mood
- Suicidal ideation
- Odd speech – of new onset; speech is understandable
- Worsening in concentration
- Decline in social, educational or occupational functioning.

It is important to stress that these symptoms should be considered as prodromal if they reflect a change or deviation from the individual’s baseline personality and functioning.

As can be seen, these symptoms are characterised by their non-specificity, but nonetheless they should alert the GP. International research has shown that people who eventually become psychotic, and have a prolonged untreated prodrome or a prolonged 'duration of untreated illness', have a poorer response to treatment in the short and medium term.

One of the main issues with the non-specificity of prodrome has been that it cannot predict which patients are going to convert to psychosis. Different studies, carried out one year after the initial assessment, have shown different conversion rates, with an average of 36.7% displaying a clear psychotic illness one year after assessment. Two similar studies from Australia and the US, published last
year, show conversion rates of 16% and 35% at two and two-and-a-half years respectively. Results from the NAPLS study indicate that the following variables are significantly associated with conversion to psychosis:

- Family history of schizophrenia with recent functional deterioration
- Unusual thought content
- Suspicion/paranoia
- Social impairment
- History of drug abuse.

Clinical vignette

John is an 18-year-old Leaving Certificate student. He came to see you at his mother’s insistence due to him appearing to be ‘depressed’ and ‘detached’. He hasn’t been sleeping well lately and he has done poorly in his exams.

The last time he was seen in the practice he was in good spirits and playing soccer in the school league. He had been an A class student throughout secondary school. He had always been very sociable and enjoyed an extensive peer network.

John says that he has been feeling ‘depressed’ for the past four months. On further questioning he says that he is not really feeling sad but rather not feeling himself. He can’t clarify in which way. He states that he finds it difficult to fall asleep although he’s not particularly anxious. The last two months, he has heard his name being called when there’s nobody around on four to five different occasions when fully alert. He states that this may be his ‘mind making up things’ but he is not sure about it.

He tried cannabis once, two years ago. The last time he drank was three months ago. He has a maternal uncle with a diagnosis of paranoid schizophrenia and is reluctant to attend the psychiatric services.

Management of prodrome

As can be seen from this vignette, the presentation in prodromal psychosis is usually vague. Despite this, it is clear that John’s baseline mental state and personality have changed over the past few months. The first step for the correct management of prodrome is a comprehensive assessment. Other diagnoses should be considered first and physical investigations might be warranted. As always in psychiatry, the first thing to do would be to rule out the possibility of an organic cause for this presentation (eg. neurological, endocrinological, infectious, etc.).

An affective disorder, either depression or bipolar, should be ruled out as it is more common than psychosis. This is a particularly difficult task as there’s an overlap between depressive symptoms and prodromal psychosis. It is always helpful to clarify what ‘feeling depressed’ means to the patient; central to the diagnosis of depression is the presence of deep sadness and hopelessness, not present in this vignette. It is key to identify the presence/absence of drug abuse. It is unlikely that an episode of cannabis use two years ago could have directly contributed to the current presentation. Ongoing use of a substance could either trigger a real prodromal state or imitate it. Schizotypal, or other personality disorders, could sometimes present with a similar case to prodrome. However, it’s clear that John’s presentation is of recent onset and that he has no marked personality traits previously. Information about family psychiatric history could help us to clarify the presentation.

Referring vs not referring

Once an ARMS has been established, the patient and his/her family should be informed. A referral to the local psychiatric services should be sought if the patient is agreeable, and particularly if he or she is in distress and there is in imminent risk (eg. suicidal ideation or worsening of insight).

In our case, John is reluctant to attend the psychiatric services. As he is not distressed, has some insight into his symptoms and shows no signs of imminent risk, his case could be followed up by the GP on a ‘wait and watch’ approach. The ARMS should clearly be flagged in the notes. John and his family should be given clear advice on monitoring his symptoms for possible deterioration, particularly for paranoia, auditory hallucinations and strange behaviour. They should be informed that in the event that psychosis occurs, the earlier he receives treatment the better the outcome.

Treatment vs no treatment

Due to the limited number and size of the studies done so far in prodrome, there are no guidelines for the active biological treatment of prodrome. Both antipsychotics and antidepressants have been used to avoid ‘conversion to psychosis’ and initial studies suggest that they may be effective. On the other hand, the long-term side-effects of these treatments, particularly in the case of weight gain and antipsychotics, have not yet been determined in large pools of patients, therefore, clear recommendations can not yet be made for routine treatment.

Clinical judgment should prevail when considering a biological treatment in prodrome. The current severity of symptoms, level of distress, family history and risk should be considered when making a decision. A decision to start medication should be accompanied, if possible, by a decision to refer the patient to a specialist in psychiatry.

Small doses of antipsychotics may be used to decrease anxiety and emerging paranoid symptoms. If they are prescribed, the dose of medication, the length of time it was taken for, the clinical response and any side-effects should be clearly documented. This information will become extremely valuable if the patient’s symptomatology ever reaches the threshold for psychosis.

Psychotic prodrome is characterised by the vagueness of its presentation. Despite this, it should always be considered in young people presenting with a decline in social, educational or occupational functioning and in the presence of sub-threshold symptoms for psychosis. As there is no solid evidence for treatment of these cases, clinical judgement should prevail.

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References on request