Psychosis in the Elderly

15

Salman Karim and Kimberley Harrison

15.1 Introduction

Psychosis is a particularly distressing psychiatric illness for sufferers and their carers, and it can feel especially difficult for practitioners dealing with its uncertain course whilst trying to instil hope. Although assessing and managing a patient with psychosis in primary care can be daunting, the majority of patients should also receive input from mental health services. Psychotic symptoms are found in a wide range of medical and psychiatric conditions. Patients with psychosis in later life can be divided into three groups: those with pre-existing schizophrenia, new diagnoses of schizophrenia ('late-life schizophrenia', also known as 'late paraphrenia') and other conditions producing hallucinations or delusions (dementia, delirium, mood disorders, delusional disorder, paranoid personality disorders). As the population ages and treatments improve, the first group is getting significantly larger and making up a greater proportion of mental illness in older people. The prevalence of all psychotic disorders over 65 years of age is 4–6 %, rising to 10 % over 85 years. However, a large proportion of these cases are related to dementia. True schizophrenia or delusional disorder in the over-65s has a prevalence of 0.5–1.0 %. There is a female preponderance, with a ratio of female to males of 5:1, which is partly because the onset of schizophrenia tends to be later in females. Sixty per cent of older people

S. Karim, MBBS, MSc, MD, FCPS
Central Lancashire Memory Assessment Service, Lancashire Care NHS Trust, Preston, Lancashire, UK
e-mail: salman.karim@manchester.ac.uk

K. Harrison, MBBS, BSc, MRCPsych (✉)
ST6 in Old Age Psychiatry, Woodlands Hospital, Greater Manchester West Mental Health Foundation Trust, Meadowsweet Lane, Little Hulton, Manchester M28 0FE, UK
e-mail: kwoodhouse@doctors.org.uk; kimberleyharrison1@nhs.net

C.A. Chew-Graham, M. Ray (eds.), *Mental Health and Older People: A Guide for Primary Care Practitioners*, DOI 10.1007/978-3-319-29492-6_15

with psychosis have paranoid schizophrenia, 30 % delusional disorder and only 10 % all other forms of psychosis [1].

15.2 Symptoms and Classification

Psychosis is best conceptualised as a syndrome with delusions and hallucinations as its core features [2] (Table 15.1). A delusion is a fixed, false belief that is out of keeping with one's social, religious and cultural background. Hallucinations are perceptions in the absence of stimuli and can occur in any of the sensory modalities. An illusion is a distortion or misinterpretation of a stimulus and is not considered to be a psychotic phenomenon. A psychotic patient will often experience more than just the core symptoms of psychosis.

Auditory hallucinations can be classified further into second or third person, command, running commentary and by the nature of the content, for example, derogatory or complimentary. Other symptoms associated with psychosis include *thought interference,* i.e. thought echo, insertion, withdrawal and broadcast, and *thought disorder* where breaks in the train of thought lead to illogical speech content. Although these symptoms are included in the diagnostic criteria for schizophrenia, they are not pathognomonic for the condition. There are no pathognomonic symptoms of schizophrenia but characteristic distortions of thinking and perception and inappropria*t*e or blunted affect are considered to be core features [3].

Psychiatrists refer to 'positive' and 'negative' psychotic symptoms especially in relation to schizophrenia. 'Positive' symptoms refer to the core psychotic features, i.e. delusions and hallucinations, whereas negative symptoms are marked apathy, social withdrawal and blunting of affect [3].

A decline in social and occupational functioning often reflects the severity. The onset of psychosis can occur in younger adult life with the sufferer 'graduating' into old age with their psychotic illness or symptoms can present for the first time in old age.

15.2.1 Functional and Organic Psychoses

Broadly speaking psychosis can be divided into functional and organic. The term 'organic' indicates a detectable physiological or structural change, resulting in a

Table 15.1 Symptoms of psychosis

Core symptoms	Delusions, hallucinations
Behavioural changes	Apathy, aimlessness, self-absorbed attitude
Mood symptoms	Depression, anxiety
Vegetative changes	Energy, sleep, appetite
Motor changes	Excitement, posturing, stupor
Cognitive symptoms	Planning, reasoning, problem solving, working memory

disturbance of normal functioning, and is commonly due to delirium (psychiatric manifestation of an underlying medical condition characterised by changes in consciousness and cognition) and neurodegenerative disorders, for example, dementia and Parkinson's disease. Other examples are during the use of, and following withdrawal from, alcohol and psychoactive substances and from brain damage [3]. A predominance of olfactory, tactile, gustatory and visual hallucinations point towards an 'organic' cause for the psychosis. The word 'functional' applies to conditions where there is no identifiable physiological or anatomical change to explain the symptoms, and from a psychiatric perspective, this includes psychotic, affective and neurotic disorders. When psychotic symptoms are present in nonpsychotic disorders, for example, depression, it often reflects the severity of the underlying primary condition.

15.2.2 Primary Psychotic Disorders

The term 'primary psychotic disorder' refers to a heterogeneous group of 'functional' disorders. In the World Health Organization's International Statistical Classification of Diseases and Related Health Problems (ICD-10), which are the main psychiatric diagnostic guidelines in the UK, schizophrenia, schizotypal disorder, schizoaffective disorder, persistent delusional disorders, induced delusional disorders, acute and transient psychotic episodes and 'other non-organic psychotic disorders' are considered to be primary psychotic disorders. The term 'other non-organic psychotic disorders' is assigned to psychotic symptoms that don't meet the criteria for the mentioned psychotic disorders or any other psychiatric disorder.

Schizophrenia is further classified as either paranoid (which is the commonest type), hebephrenic, catatonic, residual, undifferentiated or simple schizophrenia. 'Schizotypal disorder' is grouped with schizophrenia due to a probable genetic link and the similarities in anomalies of thinking, odd behaviour and affect [3]. In schizoaffective disorder, both affective (mood) and schizophrenic symptoms are prominent in the same episode. There are essentially two types: manic and depressive [3].

Persistent delusional disorders are characterised by long-standing delusions which cannot be explained by schizophrenia, an affective disorder or an organic process. Delusions must be present for at least 3 months. Induced delusional disorder is a rare condition whereby two or more people with close emotional links share the same delusion [3].

'Acute and transient psychotic disorders' include acute polymorphic (highly variable) psychosis with or without symptoms of schizophrenia, acute schizophrenia-like psychosis and an acute predominantly delusional psychosis [3].

15.2.3 Late-Onset Schizophrenia

Historically late-onset psychoses have sat uncomfortably in their relation to schizophrenia due to the existence of both significant similarities and differences and perhaps

a tendency to attribute late-onset psychoses to organic causes. Interestingly, neither ICD-10 or the American Psychiatric Association's fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) contain 'codeable' separate diagnoses for late-onset schizophrenia which means that the diagnosis is made by meeting the diagnostic criteria for schizophrenia irrespective of age. Although the first onset of schizophrenia, for the majority of suffers, occurs in late adolescence and early adult life, there is a small, but nonetheless significant, proportion of people who have their first onset of schizophrenia in middle or old age [4]. Meesters et al. revealed the 1-year prevalence of early-onset, late-onset and very late-onset schizophrenias to be 0.35 %, 0.14 % and 0.05 %, respectively [5].

Due to this debate, there was an international consensus in 1998 which closely examined existing research, and it was agreed that the word schizophrenia should be used for both early- and late-onset cases. Late-onset schizophrenia was divided further into late and very late onset representing onset after the age of 40 and 60 years, respectively [4].

15.2.4 Similarities and Differences Between Early- and Late-Onset Schizophrenias

The similarities between early- and late-onset schizophrenias include genetic risk, the presence and severity of positive symptoms, early psychosocial maladjustments and subtle brain abnormalities revealed by imaging. Late-onset schizophrenia, as compared to the early-onset subtype, has fewer negative symptoms and suffers tend to perform better on neuropsychological testing and respond better to antipsychotic medication [6, 7].

15.2.5 Risk Factors for Psychosis in Older People

Risk factors for psychosis in older people include frontal and temporal cortical degeneration, neurochemical changes associated with ageing, social isolation, sensory deficits, cognitive decline, pharmacokinetic and pharmacodynamic changes associated with age and polypharmacy [6, 8, 9].

15.3 Assessment of the Patient

Psychotic symptoms should be routinely and specifically enquired about because they won't necessarily be reported. Physical conditions can produce psychotic symptoms, for example, in delirium; therefore, one must undertake a thorough medical assessment which includes a collateral history from a carer or family member and a full physical examination to rule out and treat any underlying causative medical pathology. A thorough physical examination and full set of blood tests (to exclude metabolic causes for symptoms) are considered essential. This assessment

Table 15.2 Medications potentially causing psychotic symptoms

Antihistamine	Cimetidine
Anti-Parkinson drugs	Levodopa, amantadine, bromocriptine and procyclidine
Anti-arrhythmics	Digoxin, propranolol, quinidine, procainamide
Anti-inflammatory drugs	Aspirin, indomethacin
Anticonvulsants	Phenytoin, primidone, carbamazepine
Steroids	Prednisolone
Other drugs	Benzodiazepines and anticancer drugs

From Wood et al. [33] with permission

should be carried out in primary care, the Emergency Department (when a patient has presented acutely and been taken to the ED), on a medical ward, if the patient has been admitted, or by the old age psychiatrist.

A medication review is another important part of the investigation of psychotic symptoms as there are a number of medications that can cause psychotic symptoms (Table 15.2) during their use or withdrawal.

Whilst GPs and hospital doctors should be able to assess a patient, and identify symptoms suggestive of a psychosis, the diagnosis will usually be made by an old age psychiatrist.

15.4 Management of Psychosis in Older People

Following diagnosis of psychosis, the old age psychiatrist should negotiate a management plan with the patient, their carer (if appropriate), and communicate this to the primary care physician.

15.4.1 NICE Guideline

A guideline from the National Institute for Health and Care Excellence (NICE) [10] addresses the management and treatment of primary psychotic disorders in adults under the age of 60 years, but there are no similar published guidelines for the over 60 age group. There are however general principles which can be applied to the over 60 years age group.

The NICE guideline recommends working in partnership with the service user and their carer in an 'atmosphere of hope and optimism' [10]. There is a strong emphasis on the management of both mental and physical health, the role and needs of carers and the recovery model leading to optimal social functioning.

The NICE guideline (2014) recommends a prompt referral to mental health services if a distressed person, with an associated decline in social functioning, has transient or attenuated psychotic symptoms, other experiences or behaviour suggestive of possible psychosis or a first-degree relative with psychosis or schizophrenia. The guideline

stipulates that the assessment should be carried out by a consultant psychiatrist or a trained specialist with experience in at-risk mental states [10].

Mental health services should now be offering carers, an assessment of their needs forming the basis of an annually reviewed care plan which should be received by their GPs. Carers should also be advised about their statutory rights to a formal carer's assessment from social care services and how to access it. With the service user's permission, carers are to be included in decision-making and be offered a 'carer-focused education and support programme' [10], which has a positive message about recovery.

Oral antipsychotic medication and psychological input, namely, family intervention and cognitive behavioural therapy, are the mainstays of treatment. Psychological interventions are not recommended on their own.

The management of psychosis in older people requires special consideration especially with respect to prescribing medication but also to the legal framework under which treatment is administered. It is not uncommon for treatment decisions to be made in a patient's best interests under the Mental Capacity Act 2007 when they lack capacity to consent for themselves, for example, when managing BPSD in dementia, or to use the Mental Health Act 2007 when assessment and treatment are necessary to manage risk to the patient or others.

15.4.2 Antipsychotic Medication

Antipsychotic drugs are amongst the most commonly prescribed psychotropic medications and are the mainstay of treatment for psychotic symptoms. Second-generation antipsychotics, also known as *atypicals*, are generally preferred over first-generation antipsychotics, also known as conventional and typical antipsychotics, and are considered first-line treatments internationally [11]. The most popular second-generation antipsychotics are risperidone, olanzapine, quetiapine, aripiprazole and clozapine. There are few well-conducted trials on antipsychotic use in the elderly with the most evidence existing for risperidone.

Antipsychotics should not be initiated in primary care, for a first presentation of psychosis, unless on the advice of a consultant psychiatrist.

Prescribing psychotropic medication in the elderly requires special consideration; one must take into account medical co-morbidities and polypharmacy and the altered pharmacodynamics and pharmacokinetics associated with ageing.

A prescriber not only needs to be mindful of drug interactions and the increasing frequency and severity of side effects [12], compared to a younger adult population, but also needs to bear in mind that older patients may be more susceptible to developing the more serious side effects of psychotropic medication, for example, stroke with antipsychotics [13] and agranulocytosis [14] and neutropenia with clozapine [15]. There is a slower rate of drug absorption, due to reduced gut motility and reduced gastric acid secretion, resulting in a somewhat delayed onset of action although the same amount of the drug is eventually absorbed [16].

Although liver size is reduced in the elderly, this is only significant in the presence of hepatic disease or significantly reduced hepatic blood flow, meaning

there is no significant reduction in metabolic capacity associated with ageing per se which is fortuitous since the majority of drugs are metabolised by the liver [12]. The second-generation antipsychotic sulpiride and the mood stabiliser lithium are notable examples of drugs that do not undergo hepatic metabolism before renal secretion. As renal function decreases with age, one can assume that all elderly patients have at most two-thirds of normal renal function, with e-GFR (estimated glomerular filtration rate) being the best measure of renal function [17]. There is a greater loss in renal function associated with co-morbidities such as heart disease, diabetes and hypertension [12]. This age-related decline in renal function can lead to toxicity and side effects of drugs that are primarily excreted via the kidney.

Many drug interactions occur because some drugs inhibit or induce liver enzymes, meaning a drug can affect the metabolism of another drug indirectly. The appendices in the British National Formulary (the BNF) contain details on drug interactions.

It should be emphasised that drugs should only be prescribed when absolutely necessary. A common prescribing principle in old age psychiatry is 'start low and go slow' [18] but avoid the temptation to undertreat by prescribing a subtherapeutic dose; some drugs require the full adult dose in order to achieve the full therapeutic effect [12]. General principles, aimed at reducing drug-related risk in the elderly, include once daily administration, finding an alternative medication when a patient experiences side effects instead of treating the side effects with another medication and to 'avoid, if possible, drugs that block alpha 1 adrenoceptors, have anticholinergic side effects, are very sedative, have long half-lives or are potent inhibitors of hepatic metabolising enzymes [12].

A 'trial' of an antipsychotic is considered to be medication at the optimum dose for 4–6 weeks. Individualised treatment and care plans are promoted with decisions about antipsychotic medication informed by their side effect profiles [10].

Baseline investigations, before prescribing antipsychotics, include weight, waist circumference, pulse and blood pressure, fasting blood glucose, HbA1c, lipid profile and prolactin levels and assessment of any movement disorders. NICE now recommend the assessment of nutritional status, diet and level of physical activity. These parameters require regular monitoring. ECGs are indicated if specified by the summary of product characteristic (SPC), cardiovascular risk has been identified from the physical examination (e.g. hypertension), the patient has a history of cardiovascular disease or the service user is being admitted to a psychiatric unit [10].

Until at least the first 12 months, or until the patient has stabilised, whichever is longer, the responsibility for monitoring physical health lies primarily with the secondary care team. After this time, under shared care agreements, physical health monitoring can be transferred to primary care [10]. Physical health monitoring is a pertinent focus of clinical audit.

Side Effects of Medication (Table 15.3)

Generally speaking, first-generation (*typical*) antipsychotics are more likely to cause extrapyramidal side effects (EPSEs), anticholinergic effects and sedation at

Table 15.3 Common side effects of antipsychotics

Extrapyramidal	Acute dystonia, pseudoparkinsonism, akathesia, tardive dyskinesia
Anticholinergic	Urinary hesitancy, constipation, blurred vision, dry mouth, delirium
Gastrointestinal	Nausea, constipation, diarrhoea
Liver	Cholestatic jaundice, raised transaminases
Cardiovascular	QTc prolongation
Endocrine and metabolic	Weight gain, diabetes mellitus, hyperlipidaemia, hyperprolactinaemia, sexual problems
Other	Postural hypotension, sedation, hypersalivation, epilepsy, cerebrovascular events (TIAs, stroke)

Adapted from Karim and Byrne [6] with permission

higher doses. Second-generation antipsychotics (*atypical*) are more likely to cause metabolic side effects and cerebrovascular adverse events although at higher doses EPSEs and sedation do occur. However as a class, atypical antipsychotics should not be viewed as a homogenous group in terms of their ability to treat symptoms and their side effects [19]; therefore, the potential risks and benefits of a specific drug should be considered on an individual basis [20].

There is concern that atypical antipsychotics increase the risk of stroke compared to typical antipsychotics. In 2004, there was a Committee on Safety of Medicines (CSM) alert issued by the Medicines and Healthcare products Regulatory Agency (MHRA) [21] because manufacturer data showed an increased risk of cerebrovascular adverse events (transient ischaemia attacks, strokes) with risperidone and olanzapine. The CSM data suggested a threefold risk. Those at the highest risk seem to be people over the age of 80 years and presumably those with vascular risk factors although this is not yet proven. Mental healthcare providers are now recommended to offer 'a combined healthy eating and physical activity programme' [10] for people with psychosis especially those taking antipsychotics. Smokers should be offered help to stop smoking irrespective of previous failed attempts but be mindful of the impact of reducing or stopping smoking on olanzapine and clozapine levels. This is due to the hydrocarbons in cigarette smoke, not the nicotine, and a reduction in smoking can lead to an increase in the plasma levels of these drugs.

Interestingly, a 2004 American retrospective population-based cohort study of patients over 66 years old taking either risperidone or olanzapine concluded that olanzapine and risperidone were not associated with a statistically significant increase of stroke compared to typical antipsychotics [22].

15.4.3 Behavioural and Psychological Symptoms in Dementia (BPSD)

BPSD is a descriptive concept, not a diagnostic entity, encompassing a mixed group of noncognitive symptoms and behaviours, which includes psychotic symptoms, when they occur in the context of a dementia syndrome [23]. BPSD is a

clear indication for referral to mental health services, and it forms a significant part of the workload of old age psychiatry teams, yet it is a somewhat neglected area of research [24]. It is estimated that about two-thirds of dementia sufferers experience BPSD at any given time [24], and this figure rises to over two-thirds for dementia patients living in care homes [25]. Early identification leads to a better quality of life for suffers and their families: BPSD is a major risk factor for carer burden [26] and institutionalisation [27] and can also result in neglect and even elder abuse [28].

BPSD is likely to be a complex interplay between mental illness, physical illness, medication and the environment; therefore, environmental manipulation and behavioural treatments should be first-line management options especially in milder cases. This is an important but somewhat neglected area of research which is surprising given the controversy surrounding antipsychotic prescribing in dementia.

Despite being used for decades, antipsychotic use in the management of BPSD is a contentious issue and the subject of enduring debate due to their adverse effects and lack of properly conducted studies. Currently, risperidone is the only licensed antipsychotic in the UK for BPSD [12] although there is evidence to support the efficacy of other atypical antipsychotics: olanzapine, risperidone, quetiapine, aripiprazole and amisulpride [12]. There is some evidence to suggest that the cholinesterase inhibitors donepezil, galantamine and rivastigmine, which are ordinarily used as cognitive enhancers in Alzheimer's dementia, can also ameliorate psychotic symptoms in the disease [29, 30]. The Royal College of Psychiatrists advocates the '3T' approach; target, titration and time, i.e. drug treatments have a specific symptom target, the starting dose should be low and titrated upwards, and they should be time limited. Although more research is needed to establish the natural course of BPSD, a 2004 study [31] suggests that withdrawal from treatment after a 3-month symptom-free period can be successful.

Both the National Institute for Health and Care Excellence (NICE) and Royal College of Psychiatrists have issued guidance on BPSD. Arguably, old age psychiatrists view the NICE guidelines as too restrictive for their purposes with too great an emphasis on the associated risks and unrealistic expectations of resources, and the Royal College guidelines are perceived as more useful. A survey completed by 31 % of career old age psychiatrists indicated that the average number of their patient's prescribed antipsychotics was 40 % with a range of 5–90 %. The most common reason for prescribing was psychosis at 93.3 %. The most commonly prescribed antipsychotic by far was quetiapine, and the first-generation antipsychotic haloperidol was the second most popular choice [32].

15.4.4 Subsequent Acute Episodes of Psychosis and Referral in Crisis

Crisis resolution and home treatment teams (CRHTT) should now be the single point of access to *acute* community and inpatient mental health services. It is also the first-line service to support people who are too unwell (severity of symptoms

and high risk to self and/or others) to be managed by other community mental health teams and should always be considered as an alternative to inpatient admission. They also play a key role in early discharge from hospital. Again, oral antipsychotic medication and psychological interventions are the mainstay of treatment for acute exacerbations or recurrent symptoms [10].

Service users should be told there is a high risk of relapse if medication is stopped in the first 1–2 years. Monitoring for signs of relapse is necessary at least 2 years following the withdrawal of antipsychotic medication [10].

15.4.5 Psychological and Psychosocial Interventions

According to the 2014 NICE guideline, CBT and family interventions can be started in the acute phase, including inpatient settings, or later. Consider offering art therapies to people with psychosis or schizophrenia, and again this can be started during the acute phase of the illness or later. Group art therapies, which promote creative expression, should be provided by a Health and Care Professions Council registered art therapist. Therapies commenced during an inpatient admission should continue after discharge. Supportive psychotherapy and counselling should not be routinely offered as specific interventions, but service user preference should be taken into account especially if more efficacious therapies (CBT, family interventions and art therapies) are not available locally. Similarly, it is not recommended to offer adherence therapy or social skills training. Family therapy is particularly useful following a recent relapse or for someone who is at risk of relapse and also for persistent symptoms [10].

15.4.6 Return to Primary Care

The current recommendations for mental health services are to 'offer people with psychosis or schizophrenia whose symptoms have responded effectively to treatment and remain stable the option to return to primary care for further management' [10]. Physical health monitoring becomes the responsibility of primary care following the transfer of such responsibility and requires annual review with the recommendation that the care coordinator and psychiatrist receive a copy of these results.

15.4.7 Relapse and Re-referral to Secondary Care

When a patient with an established diagnosis is showing signs of relapse, one should refer to the 'crisis' section of the care plan. Referral should also be considered if the patient has poor response to treatment, non-compliance to medication, intolerable side effects, substance misuse or risk to self or others. Depot antipsychotics (long-acting injectable preparations) can be offered for patient preference and to aid compliance. Clozapine is offered for treatment resistant schizophrenia, i.e. following an inadequate

response to at least two sequential trials of different antipsychotic drugs of which at least one should be an atypical antipsychotic [10].

15.5 Case Study

Mrs Barbara Taylor is an 85-year-old widow who lives alone in a semi-detached property. She has no children, but she receives visits from her great-niece every 2 months. Mrs Taylor had begun repeatedly accusing her neighbour of trying to poison her cat by leaving contaminated cat food in her garden and of 'piping gas' into the house when she was sleeping. She had grabbed her neighbour by his shirt threatening to get her own back on him. She could also hear her neighbours making negative comments about her at night time, and sometimes she heard a running commentary of her actions which was impacting on her sleep. Her neighbour, who was becoming increasingly intolerant, spoke to her niece who took Mrs Taylor to her GP. She was referred urgently to mental health services following an 'organic screen' which included a physical examination, medication review, a full set of bloods (FBC, U&Es, LFTs, TFTs, CRP, B12, folate, glucose, bone profile, lipids) and a urine microscopy, culture and sensitivity.

Mrs Taylor received a course of antidepressants 30 years ago following the death of her husband, but there was no other psychiatric history including no history of deliberate self-harm. She also had no history of harm to others or a forensic history. There was no family history of mental illness that she could recall.

Mrs Taylor wears hearing aids and takes bisoprolol for essential hypertension and simvastatin for hypercholesterolemia, and occasionally she takes co-codamol 8/500 mg tablets for arthritis.

Mrs Taylor does not have any history of ischaemic heart disease or cerebrovascular disease. She has never had any brain imaging.

Mental state examination revealed a pleasant lady who was easy to engage. She was appropriately dressed and kempt. Her speech was fluent, spontaneous, coherent and relevant, and she was able to give a good account of herself. Her mood was euthymic with a reactive and congruent affect. She exhibited persecutory delusions about her neighbour poisoning her and her dog, but there was no formal thought disorder or thoughts plans or intent to harm herself or others. There was also no thought interference. There were no auditory hallucinations during the assessment; however, she described derogatory third-person auditory hallucinations which were sometimes running commentary in nature, but there were no perceptual disturbances in the other sensory modalities. Her insight was impaired, but she agreed to take antipsychotic medication as it might help with her sleep.

A baseline ECG was taken (her QTc interval was within normal range), and she was started on olanzapine, as an outpatient, with her consent following a discussion about side effects. She responded well to the olanzapine and received occupational therapy input which enabled her to attend a day centre twice a week. Unfortunately, she developed impaired glucose tolerance (polydipsia, polyuria, fatigue) and she was changed to aripiprazole with continued improvement.

Mrs Taylor received a diagnosis of very late-onset schizophrenia. Characteristic features of very late-onset schizophrenia, as compared to the early- and late-onset varieties, includes an increased likelihood of sensory impairment, social isolation, visual hallucinations and a greater risk of developing tardive dyskinesia. Significantly more women are affected than men. Formal thought disorder, affective blunting and family history are less likely.

15.6 Suggested Activity

A potentially neglected area of clinical practice is the monitoring of physical health for patients on antipsychotics and is an ideal topic for audit because patients with psychosis on treatment are arguable doubly disadvantaged; firstly because their psychosis may hinder their ability to look after their health and secondly due to the side effects of antipsychotic medication. Older people are also more likely to have physical co-morbidities because of their age. An audit of the physical healthcare of older people with psychosis may lead to system changes in your practice and improve patient care.

Key Points

- Psychotic symptoms in older people are not uncommon but may not be apparent.
- Diagnosis can be difficult, as patients may not volunteer their symptoms. A collateral history from family or carers is important.
- For suspected late-onset psychosis, it is important to undertake a physical examination and investigations and prompt referral to specialist services will allow patients access to diagnosis, treatment and support.
- Clinicians should take a holistic approach when assessing the needs of their older patients with psychosis and routinely involve relatives and the multidisciplinary team.
- Pharmacological and psychological treatments are recommended but unacceptable variations in service provision in CBT exist.
- Management of psychosis in older people requires special consideration especially with respect to the legal framework under which treatment is administered.

References

1. Geddes P. McKnight psychiatry, 4th ed. Oxford: Oxford University Press; 2012. ISBN 978-0-19-923396-0.
2. Cowen P, Harrison P. The shorter Oxford textbook of psychiatry, 6th ed. Oxford: Oxford University Press; ISBN 9780199605613.

3. The World Health Organization. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992.
4. Howard, et al. Late-onset schizophrenia and very-late-onset schizophrenia-like psychosis: an international consensus. Am J Psychiatry. 2000;157:172–8.
5. Meesters, et al. Schizophrenia spectrum disorders in later life: prevalence and distribution of age at onset and sex in a Dutch catchment area. Am J Geriatr Psychiatry. 2012;20(1): 18–28.
6. Karim S, Byrne E. Treatment of psychosis in elderly people. Adv Psychiatr Treat. 2005;11:286–96.
7. Palmer, et al. Schizophrenia in late life: findings challenge traditional concepts. Harv Rev Psychiatry. 2001;9:51–8.
8. Targum SD. Treating psychotic symptoms in elderly patients. Prim Care Companion J Clin Psychiatry. 2001;3:156–63.
9. Targum SD, Abbott JL. Treating psychotic symptoms in the elderly: a spectrum of disorders. J Clin Psychiatry. 1999;60 Suppl 8:4–10.
10. National Institute for Health and Care Excellence, Guidelines (CG178), psychosis and schizophrenia in adults: treatment and management, February 2014.
11. Gaebel W, Weinmann S, Sartorius N. Schizophrenia practice guidelines: international survey and comparison. Br J Psychiatry. 2005;187:248–55.
12. Taylor et al. The Maudsley, prescribing guidelines in psychiatry, 11th ed. West Sussex, UK: Wiley-Blackwell; 2012. 978-0-470-97948-8.
13. Douglas, et al. exposure to antipsychotics and risk of stroke: self controlled case series study. Br Med J. 2008;337:a1227.
14. Munro, et al. Active monitoring of 12,760 clozapine recipients in the UK and Ireland. Beyond Pharmacovigilance. Br J Psychiatry. 1999;175:576–80.
15. O'Connor, et al. The safety and tolerability of Clozapine in aged patients: a retrospective clinical file review. World J Biol Psychiatry. 2010;11:788–91.
16. Mayersohn M. Special pharmacokinetic considerations in the elderly. In: Evans WE, Schentag JJ, Jusko WJ, editors. Applied pharmacokinetics principles of therapeutic drug monitoring. Spokane: Applied Therapeutics; 1986. p. 229–93.
17. Morris R, et al. Lithium and eGFR: a new routinely available tool for the prevention of chronic kidney disease. Br J Psychiatry. 2008;193:93–5.
18. Gurwitz JH. Start low and go slow: dosing of antipsychotic medications in elderly patients with dementia. Arch Intern Med. 1995;155(18):2017–8.
19. Davis JM, Chen N, Glick ID. A meta-analysis of the efficacy of second-generation antipsychotics. Arch Gen Psychiatry. 2003;60:553–64.
20. Ucok, Gaebel. Side effects of atypical antipsychotics: a brief overview. World Psychiatry. 2008;7(1):58–62.
21. Medicines & Healthcare products Regulatory Agency, atypical antipsychotic drugs and stoke, 9th Mar 2004, mhra.gov.uk.
22. Herman, et al. Atypical antipsychotics and risk of cerebrovascular accidents. Am J Psychiatry. 2004;161:1113–5.
23. Lawlor B. Managing behavioural and psychological symptoms in dementia. Br J Psychiatry. 2002;181:463–5.
24. Lyketsos, et al. Mental and behavioural disturbances in dementia: findings from Cache County Study on Memory and Aging. Am J Psychiatry. 2000;157:708–14.
25. Margallo-Lana, et al. Prevalence and pharmacological management of behavioural and psychological symptoms amongst dementia suffers living in care environments. Int J Geriatr Psychiatry. 2001;16:39–44.
26. Coen, et al. Behaviour disturbance and other predictors of carer burden in Alzheimer's disease. Int J Geriatr Psychiatry. 1997;12:331–6.
27. O'Donnell, et al. Incontinence and troublesome behaviours predict institutionalisation in dementia. J Geriatr Psychiatry Neurol. 1992;5:45–52.

28. Steele, et al. Psychiatric symptoms and nursing home placement of patients with Alzheimer's disease. Am J Psychiatry. 1990;147:1049–51.
29. Finkel SI. Effects of rivastigmine on behavioural and psychological symptoms of dementia in Alzheimer's disease. Clin Ther. 2004;26:980–90.
30. Wynn ZJ, Cummings JL. Cholinesterase inhibitor therapies and Neuropsychiatric manifestations of Alzheimer's disease. Dement Geriatr Cogn Disord. 2004;17:100–1008.
31. Ballard, et al. A 3 month randomized, placebo-controlled, neuroleptic discontinuation study in 100 people with dementia: the neuropsychiatric inventory median cut off is a predictor of clinical outcome. J Clin Psychiatry. 2004;65:114–9.
32. Haw, et al. Guidelines on antipsychotics for dementia—are we losing our minds? Psychiatry Bull. 2009;33:57–60.
33. Wood KA, Harris MJ, Morreale A, Rizos AL. Drug-induced psychosis and depression in the elderly. Psychiatry Clin North Am. 1988;11(1):167–93.