Clinical challenge

These questions are based on the Focus articles in this issue. Please choose the single best answer for each question.

CASE 1

Ayesha, a female child aged 22 months, attends with her parents. They are very anxious because they have noticed that she has started to develop breast tissue.

QUESTION 1

Isolated premature thelarche is defined as the development of breast tissue before the age of:

A. two years
B. five years
C. seven years
D. eight years

QUESTION 2

Risk factors that may indicate an increased risk of progression to premature puberty include breast development that occurs after the age of 5–6 years and:

A. girls presenting with a Tanner stage 3 breast score
B. girls presenting with a Tanner stage 2 breast score
C. girls whose birth weight was on the 90th centile
D. girls whose birth weight was beyond the 90th centile

QUESTION 3

Clinical features associated with premature thelarche that may suggest precocious puberty, rather than idiopathic premature thelarche, include accelerated growth velocity, progressive breast development and:

A. onset at age two years
B. onset at age five years
C. early onset of pubarche
D. emotional lability

QUESTION 4

The most reliable investigation in primary care to distinguish isolated benign premature thelarche from precocious puberty is:

A. paediatric breast ultrasound
B. paediatric pelvic ultrasound
C. serial serum oestradiol levels
D. X-ray of the left hand and wrist

Continued on page 283.

How to use *AJGP* for your CPD

Each issue of the *Australian Journal of General Practice* (*AJGP*) focuses on a specific clinical or health topic. Many GPs find the entire issue of interest and relevance to their practice and others explore the issue more selectively.

However you prefer to engage with the issue, you can use *AJGP* for your CPD. If you want to use the entire issue for CPD, carefully and critically work your way through each Focus article, considering how you might adjust your practice in response to what you have learnt, then complete the Clinical challenge.

Your CPD will be automatically recorded for you
When you complete the *AJGP* Clinical challenge and/or Measuring Outcomes (MO) companion activity through *gplearning* your CPD hours will be automatically recorded on myCPD Home within 12 hours.

Self-recorded reading
If you prefer to read and reflect on specific articles without completing the Clinical challenge, record this via quick log on myCPD Home. As guidance, each article in *AJGP* can be recorded for up to two CPD hours, split evenly between EA and RP CPD time.

Self-directed MO options
You can also do self-directed MO CPD related to this issue of *AJGP*. Choose any topic area from within the issue and undertake a quality improvement activity. This can be done on your own, with a colleague, in a group, or perhaps with the assistance of our practice manager or PHN quality improvement team.

Consider evaluating your practice setting's approach to breast cancer screening and assess how you support women who are at moderate to high risk, as outlined by the Focus article by Mazza and Emery. A simple evaluation might be recorded for several MO hours, while a more comprehensive PDSA approach would provide at least 10 hours of MO CPD.

Evaluating and implementing your strategy with five patients could provide at least 10 hours MO CPD. Log in to myCPD Home (https://bit.ly/myCPDhome) for guides and templates to complete your self-directed quality improvement activities and record your MO hours.

The **Clinical challenge** consists of multiple-choice and short answer questions based on the Focus articles in this issue of *AJGP*. Complete the Clinical challenge to earn 10 CPD hours, split evenly between Educational Activities (EA) and Reviewing Performance (RP). This CPD allocation includes reading time for the Focus article.

The **Measuring Outcomes (MO) companion activity** assists you to implement and evaluate changes in your practice in line with the guidance provided in a specific article in this issue of *AJGP*. Complete the companion activity to earn five MO hours.

Important notice: The AJGP Clinical Challenge will be moving to **digital-only** soon. From July 2025, you can access your CPD activity through the AJGP website (www1.racgp.org.au/ajgp/home) or on *gplearning*.

Visit https://bit.ly/MayCCMO and select the 'Register' button to find both the Clinical challenge and Measuring Outcomes companion activity.

Scan the QR code for a custom quick log when you read the whole issue without completing the Clinical challenge.

CASE 2

Paula, aged 47 years, attends for a routine health check for women aged 45–50 years. She is perimenopausal, has a family history of breast cancer and is concerned about her own risk of developing breast cancer. Paula asks if she should commence breast screening earlier than age 50 years and if her breast density will be reported on any screening tests that she might undergo.

QUESTION 5

You discuss with Paula modifiable risk factors for developing breast cancer. Modifiable risk factors such as overweight, obesity, alcohol and physical inactivity contribute to approximately what proportion of global breast cancer deaths?

A. 11%
B. 15%
C. 21%
D. 31%

QUESTION 6

You use the iPrevent tool with Paula, which establishes that she has a moderately increased risk of breast cancer. She asks you about risk-reducing interventions. Risk-reducing interventions that may be suitable for Paula include:

A. avoidance of oestrogen therapy
B. chemoprophylaxis with raloxifene
C. chemoprophylaxis with tamoxifen
D. risk-reducing bilateral mastectomy

QUESTION 7

Women with a moderately elevated risk of breast cancer may be advised that:

A. annual breast ultrasound screening is recommended from age 40 years
B. annual mammographic screening is recommended from age 40 years
C. annual MRI is recommended for screening from age 40 years
D. biennial mammographic screening is recommended from age 50 years

QUESTION 8

Women with moderately dense breasts reported on breast screening have a breast cancer risk that is:

A. approximately 0.6 times that of women with average breast density
B. approximately 1.5 times that of women with average breast density
C. approximately three times that of women with average breast density
D. approximately the same as that of women with average breast density

CASE 3

Xia is a teacher, aged 34 years, who is breastfeeding her daughter, aged six weeks. Xia is experiencing a burning sensation in her left breast during and after breastfeeding. On examination, Xia is afebrile. Her left nipple is bright pink and there is one small fissure in the nipple skin.

QUESTION 9

What is the estimated prevalence of lactational mastitis among women in Australia who are breastfeeding?

A. 10%
B. 20%
C. 30%
D. 40%

QUESTION 10

The most likely diagnosis based on the clinical picture is:

A. candidiasis of the nipple
B. contact dermatitis of the nipple
C. lactational mastitis
D. Raynaud's phenomenon of the nipple

These questions are based on the Focus articles in this issue. Please write a concise and focused response to each question.

CASE 1

Ayesha, a female child aged 22 months, attends with her parents. They are very anxious because they have noticed that she has started to develop breast tissue.

QUESTION 1

Discuss the clinical implications for girls who experience premature thelarche, and compare it to the clinical implications for girls who experience precocious puberty.

QUESTION 2

Discuss your approach to taking a history from the parents of a girl with premature breast development.

QUESTION 3

Discuss your approach to the examination of a girl with premature breast development.

QUESTION 4

After a thorough history and clinical examination, you determine that the most likely cause of Ayesha's premature breast development is isolated idiopathic premature thelarche. Discuss your management plan for Ayesha, including the need for investigations and recommended intervals for review.

CASE 2

Paula, aged 47 years, attends for a routine health check for women aged 45–50 years. She is perimenopausal, has a family history of breast cancer and is concerned about her own risk of developing breast cancer. Paula asks if she should commence breast screening earlier than age 50 years and if her breast density will be reported on any screening tests that she might undergo.

QUESTION 5

Reflect on the breast cancer risk factors that are modifiable. Using the 5As approach (see www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/snap/approach-to-preventive-care-in-general-practice), discuss how you would apply the 5As (Ask, Assess, Advise/agree, Assist and Arrange) to one breast cancer risk factor that is modifiable.

QUESTION 6

List three tools available in Australia that can be used to assess a woman's individual risk of developing breast cancer, and discuss how they differ in their clinical application.

QUESTION 7

It is established after using the iPrevent tool that Paula has a moderately increased risk of breast cancer. She asks you about risk-reducing interventions.

List three side effects of tamoxifen.

QUESTION 8

Paula asks you about breast density. She wants to know why it is now being

included on mammogram reports, and if it is linked to a higher risk of breast cancer. Discuss the significance of breast density.

CASE 3

Xia is a teacher, aged 34 years, who is breastfeeding her daughter, aged six weeks. Xia is experiencing a burning sensation in her left breast during and after breastfeeding. On examination, Xia is afebrile. Her left nipple is bright pink and there is one small fissure in the nipple skin.

QUESTION 9

Discuss the management of nipple candidiasis for both Xia and her daughter.

QUESTION 10

If Xia does not respond to your initial treatment, discuss two other differential diagnoses that should be considered, and their management.

April 2025 Multiple-choice question answers

ANSWER 1: B

Most ketogenic diets limit total carbohydrate intake to less than 50 g daily.

ANSWER 2: D

The average Australian diet has more than 250 g of carbohydrate daily and/or >55% of total dietary energy from carbohydrates.

ANSWER 3: B

Side effects of a ketogenic diet can include ketone breath, increased risk of kidney stones and B vitamin deficiencies.

ANSWER 4: D

Pharmacotherapy for the treatment of obesity is not currently Pharmaceutical Benefits Scheme subsidised.

ANSWER 5: B

Obesity is a chronic disease affecting nearly one-third of Australian adults.

ANSWER 6: C

Semaglutide is administered once weekly by subcutaneous injection.

ANSWER 7: C

All pharmacotherapy options for the treatment of obesity are contraindicated during pregnancy and lactation and women should be advised to cease anti-obesity medications at least two months prior to trying to conceive.

ANSWER 8: B

Bariatric surgery typically results in 30% total weight loss initially, stabilising to around 25% long term.

ANSWER 9: A

Sleeve gastrectomy is the most common bariatric surgical procedure, accounting for 80% of cases in 2023.

ANSWER 10: D

It takes an average of nine years after they first struggle with their weight for Australians to present to their general practitioner for weight management.

April 2025 Short answer question answers

ANSWER 1

In a recent systematic review, intermittent fasting trials reported no serious adverse effects. Fasting-related safety concerns include mood-related side effects and binge eating. Study participants occasionally reported dizziness, weakness, bad breath, headache, feeling cold, lack of concentration, sleep disturbance, nausea and constipation. Whether they were significantly different from the baseline has been challenged. Fasting is not recommended for pregnant or lactating women or individuals with a history of eating disorders. It is also not appropriate for those who need to take medication with food at specific times during the day.

ANSWER 2

Six chronic health conditions that a Mediterranean diet has been shown to improve are:

- cardiovascular disease
- obesity
- cognitive decline
- some cancer risks
- mental health
- insulin resistance and its associated health conditions such as prediabetes, type 2 diabetes and metabolic syndrome.

ANSWER 3

Children and people with liver failure, pancreatitis and inborn fat digestion disorders should avoid the ketogenic diet. Pregnant and lactating women, those with type 1 diabetes and people prescribed sodium glucose transporter type-2 inhibitors would be best advised not to follow this eating pattern without specific intent, medical monitoring and an understanding of the potential significant risks.

ANSWER 4

Pharmacotherapy is indicated as an adjunct for those living with obesity (body mass index [BMI] ≥30 kg/m^2) or those who are overweight (BMI ≥27 kg/m^2) with a least one weight-related complication, including type 2 diabetes, dyslipidaemia, hypertension, metabolic associated fatty liver disease, obstructive sleep apnoea and osteoarthritis.

ANSWER 5

Glucagon-like peptide 1 receptor agonists enhance glucose-dependent insulin secretion, reduce glucagon secretion and delay gastric emptying making them effective drugs for the treatment of type 2 diabetes and obesity.

ANSWER 6

Tirzepatide has shown a significant improvement in obesity-related comorbidities including:

- obstructive sleep apnoea
- metabolic associated fatty liver disease
- heart failure with preserved ejection fraction.

ANSWER 7

Before prescribing pharmacotherapy for obesity, an initial assessment should be undertaken with a focus on medical (type 2 diabetes, cardiometabolic,

metabolic associated fatty liver disease, obstructive sleep apnoea, polycystic ovarian syndrome, osteoarthritis) and psychological (depression, anxiety) complications, including assessment for the presence of disordered eating.

ANSWER 8

Bariatric surgery is recommended for patients with a body mass index (BMI) over 35 kg/m^2, regardless of obesity-related comorbidities. It is also advised for individuals with a BMI over 30 kg/m^2 who have type 2 diabetes. Surgery can also be considered for patients with a BMI under 35 kg/m^2 if non-surgical methods have not led to significant weight loss or improvement in obesity-related comorbidities. Other indications include as a bridge to other treatment such as joint arthroplasty, abdominal wall hernia repair and organ transplantation.

ANSWER 9

The laparoscopic sleeve gastrectomy procedure removes the greater curve and fundus of the stomach, leaving a narrow tube-like structure, which restricts food intake while preserving the pylorus. Benefits include an operation restricted only to the stomach and maintaining endoscopic access to the duodenum.

ANSWER 10

Barriers to success cited by general practitioners in the literature related to managing obesity using standard consults include poor knowledge and low confidence in discussing specific strategies, weight stigma threatening the doctor–patient relationship, lack of local resources and referral options, and inadequate remuneration.