A blue circle with white background

AI-generated content may be incorrect.

**example**

**MCQs**

A blue and white background with white text

AI-generated content may be incorrect.

**السلام عليكم ورحمة الله وبركاته،**

زملائي الأعزاء،

هذا الملف يحتوي على مجموعة من الأسئلة متعددة الخيارات (MCQs) المستخلصة من محاضرة "example"

تم تصميم هذه الأسئلة لمساعدتكم على مراجعة المادة العلمية واختبار فهمكم للمفاهيم الأساسية التي تناولتها المحاضرة.

يرجى العلم أن هذه الأسئلة تم إنشاؤها باستخدام تقنيات الذكاء الاصطناعي باداه MedSense AI التي طورتها، وذلك بعد أن قمت بإجراء بحث معمق في قواعد ومبادئ صياغة الأسئلة الطبية الدقيقة، حيث قمت تعليم الذكاء الاصطناعي إنشاء أسئلة تحاكي المعايير الأكاديمية.

وقد تم مراجعة جميع الأسئلة للتأكد من دقتها وملاءمتها، ولكنها لا تغني عن الرجوع إلى المصادر الرئيسية للمادة.

**بالتوفيق والسداد ولا تنسونا من صالح دعائكم.**

**مع تحيات زميلكم يوسف الصباغ.**

**1714001878-1**

**What is the approximate incidence of Down syndrome at birth?**

a) 1 in 400 births

b) 1 in 500 births

c) 1 in 600 births

d) 1 in 700 births

e) 1 in 800 births

**Correct Answer: c) 1 in 600 births**

**1714001878-2**

**Which of the following is the most common genetic cause of Down syndrome?**

a) Translocation trisomy

b) Mosaicism

c) Meiotic non-disjunction

d) Robertsonian translocation

e) Deletion mutation

**Correct Answer: c) Meiotic non-disjunction**

**1714001878-3**

**Approximately what percentage of Down syndrome cases are attributed to meiotic non-disjunction?**

a) 1%

b) 4%

c) 70%

d) 95%

e) 100%

**Correct Answer: d) 95%**

**1714001878-4**

**A couple is expecting a child. Genetic testing reveals that the father is a balanced translocation carrier for chromosome 21. What type of Down syndrome, if any, is most likely in the child?**

a) Meiotic non-disjunction

b) Translocation trisomy (inherited)

c) Mosaicism

d) Translocation trisomy (sporadic)

e) The child will not have Down Syndrome

**Correct Answer: b) Translocation trisomy (inherited)**

**1714001878-5**

**A child is diagnosed with Down syndrome. Karyotyping reveals a mix of cells with a normal chromosome number and cells with trisomy 21. Which type of Down syndrome does this child have?**

a) Meiotic non-disjunction

b) Translocation trisomy

c) Mosaicism

d) Robertsonian translocation

e) Partial trisomy

**Correct Answer: c) Mosaicism**

**1714001878-6**

**A 35-year-old woman gives birth to a child with Down syndrome due to meiotic non-disjunction. Which of the following statements is most likely true regarding parental karyotypes?**

a) Both parents will have trisomy 21.

b) Both parents will have a balanced translocation.

c) The mother will have mosaicism.

d) Karyotyping of both parents is usually normal.

e) The father will have an XYY karyotype.

**Correct Answer: d) Karyotyping of both parents is usually normal.**

**1714001878-7**

**A newborn is diagnosed with Down syndrome. Further genetic testing reveals that the baby has 46 chromosomes, but one chromosome 14 has an extra copy of chromosome 21 attached to it. Which type of Down syndrome is this?**

a) Trisomy 21 due to meiotic nondisjunction

b) Mosaic Down syndrome

c) Translocation Down syndrome

d) Partial Trisomy 21

e) Ring chromosome

**Correct Answer: c) Translocation Down syndrome**

**1714001878-8**

**What percentage of Down syndrome cases is represented by the mosaic type?**

a) 1%

b) 4%

c) 5%

d) 95%

e) 70%

**Correct Answer: a) 1%**

**1714001878-9**

**Which statement accurately describes sporadic translocation Down syndrome?**

a) It is always inherited from a parent with a balanced translocation.

b) It arises de novo in the affected individual, and both parents are usually normal.

c) It is more common in mothers over 35 years of age.

d) It always involves a translocation between chromosomes 13 and 21.

e) It results from mitotic nondisjunction.

**Correct Answer: b) It arises de novo in the affected individual, and both parents are usually normal.**

