A nine year old with cerebral palsy is scheduled for a Hamstring release surgery under general anaesthesia. The child is on Sodium valproate, and has an implanted baclofen pump.

A) List three key clinical features of cerebral palsy (3 marks)
   1. ______________________________________________________
   2. ______________________________________________________
   3. ______________________________________________________

B) List the motor manifestations which form basis of classification of cerebral palsy (3 marks)
   1. ______________________________________________________
   2. ______________________________________________________
   3. ______________________________________________________

C) What are the possible causes of cerebral palsy (2 marks)
   1. ______________________________________________________
   2. ______________________________________________________

D) What is the single intervention that has possibly delayed need for surgery in children with cerebral palsy? (1 mark)
   1. ______________________________________________________
**E) What are the common indications for surgical intervention in a child with CP? (2 marks)**

1. 
2. 

**F) What specific history would you elicit during Preoperative evaluation of this child? (3 marks)**

1. 
2. 
3. 

**G) What are the anticipated respiratory complications in this child? (2 marks)**

1. 
2. 

**H) What is the most likely cause of intra-operative hypotension in this child? (1 mark)**

1. 

**I) What are your postoperative pain relief options? (2 marks)**

1. 
2. 

**J) Would you consider epidural analgesia for postoperative pain relief?**

Yes ☐ No ☐

Give reason for your answer.

1. 

<table>
<thead>
<tr>
<th>Q</th>
<th>Marking guidance</th>
<th>Mark</th>
<th>Comments</th>
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<tbody>
<tr>
<td>A</td>
<td>Behavioural problems</td>
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<tr>
<td></td>
<td>Quadriplegia</td>
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<tr>
<td></td>
<td>Autonomic disturbances</td>
<td>1</td>
<td></td>
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<tr>
<td></td>
<td>Visual loss/Hearing loss</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor temperature control</td>
<td>1</td>
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</tr>
<tr>
<td></td>
<td>Seizure disorder</td>
<td>1</td>
<td>Accept any three</td>
</tr>
<tr>
<td>B</td>
<td>Spasticity</td>
<td>1</td>
<td>Accept</td>
</tr>
<tr>
<td></td>
<td>Athetoid movements</td>
<td>1</td>
<td>Increased tone/ hypertonia</td>
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<tr>
<td></td>
<td>Dyskinesia</td>
<td>1</td>
<td>Writhing/purposeless movements</td>
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<td></td>
<td>Tremor/fine movement difficulty</td>
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<tr>
<td>C</td>
<td>Genetic problems</td>
<td>1</td>
<td>Do not accept prematurity</td>
</tr>
<tr>
<td></td>
<td>Neonatal hypoxia / sepsis</td>
<td>1</td>
<td>( Not causative per-say, but a coincidence )</td>
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<tr>
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<td>Intra-ventricular haemorrhage</td>
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<tr>
<td>D</td>
<td>Botulinum toxin injection</td>
<td>1</td>
<td>Accept BOTOX</td>
</tr>
<tr>
<td>E</td>
<td>Muscle spasms</td>
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<td>Accept</td>
</tr>
<tr>
<td></td>
<td>Impaired motor function</td>
<td>1</td>
<td>Severe pain</td>
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<tr>
<td></td>
<td>Contracture</td>
<td>1</td>
<td>Do not accept</td>
</tr>
<tr>
<td></td>
<td>Bulbar plasy/ swallowing issues</td>
<td>1</td>
<td>Tendon release ( This is an intervention)</td>
</tr>
<tr>
<td></td>
<td>Joint deformity</td>
<td>1</td>
<td>Accept any two</td>
</tr>
</tbody>
</table>
### F
- Upper respiratory tract infection
- Gastro- Oesophageal reflux
- Seizure frequency

Accept any two
Max 2 marks

### G
- Airway irritability
- Increased salivation/ secretions
- Risk of Aspiration

Accept any two
Max 2 marks

### H
- Poor oral intake
- Preoperative dehydration

Accept any one
Max 1 mark

### I
- Opioid
- Baclofen / Midazolam
- PCA/ NCA

Accept morphine
Accept any two
Max 2 marks

### J
- No Exercise caution in view of implanted baclofen pump

Max 1 mark

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Reference: eLa 04b_13_13 Anaesthesia for a Child With Cerebral Palsy

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