Damage to the pituitary-thalamic axis, the director of the endocrine glands, can cause cascading negative effects to all glandular systems:

References:
<table>
<thead>
<tr>
<th>Is it a mild, moderate, or severe TBI?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Injury Mechanism:</strong></td>
</tr>
<tr>
<td>&quot;Mild&quot;</td>
</tr>
<tr>
<td>Non-penetrating or blast.</td>
</tr>
<tr>
<td>&quot;Moderate&quot;</td>
</tr>
<tr>
<td>Frequently mixed or blast</td>
</tr>
<tr>
<td>&quot;Severe&quot;</td>
</tr>
<tr>
<td>Penetrating, acceleration/deceleration, blast</td>
</tr>
<tr>
<td><strong>Change/Loss of Consciousness (C/LOC):</strong></td>
</tr>
<tr>
<td>&lt;30 min.</td>
</tr>
<tr>
<td>30 min – 24 hrs.</td>
</tr>
<tr>
<td>&gt; 24 hrs.</td>
</tr>
<tr>
<td><strong>Amnesia of Event:</strong></td>
</tr>
<tr>
<td>&lt;24 hrs.</td>
</tr>
<tr>
<td>24 hrs. – 7 days</td>
</tr>
<tr>
<td>&gt; 7 days</td>
</tr>
<tr>
<td><strong>Glasgow Coma Scale (GCS)</strong></td>
</tr>
<tr>
<td>13-15</td>
</tr>
<tr>
<td>9-12</td>
</tr>
<tr>
<td>&lt;9</td>
</tr>
<tr>
<td><strong>Imaging:</strong></td>
</tr>
<tr>
<td>Negative (-)</td>
</tr>
<tr>
<td>Positive (+) or (-)</td>
</tr>
<tr>
<td>(+)</td>
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</tbody>
</table>

(Table of original design. Based on data from the National Institutes of Health [NIH], 2013)

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**The Health-Related Quality of Life Questionnaire 15D©**

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**QUALITY OF LIFE QUESTIONNAIRE (15D)**

Please read through all the alternative responses to each question before placing a cross (x) against the alternative that best describes your present health status. Continue through all 15 questions in this manner, giving only one answer to each.

**Question 1. Mobility**

1. I am able to walk normally (without difficulty) indoors, outdoors, and on stairs.
2. I am able to walk without difficulty indoors, but outdoors and/or on stairs I have slight difficulties.
3. I am able to walk without help indoors (with or without an appliance), but outdoors and/or on stairs only with considerable difficulty or with help from others.
4. I am able to walk indoors only with help from others.
5. I am completely bed ridden and unable to move about.

**Question 2. Vision**

1. I see normally; that is, I can read newspapers and TV text without difficulty (with or without glasses).
2. I can read papers and/or TV text with slight difficulty (with or without glasses).
3. I can read papers and/or TV text with considerable difficulty (with or without glasses).

**Question 3. Hearing**

1. I can hear normally; that is, normal speech (with or without a hearing aid).
2. I hear normal speech with a little difficulty.
3. I hear normal speech with considerable difficulty; in conversation I need voices to be louder than normal.
4. I hear even loud voices poorly; I am almost deaf.
5. I am completely deaf.

**Question 4. Breathing**

1. I am able to breathe normally; that is, with no shortness of breath or other breathing difficulty.
2. I have shortness of breath during heavy work or sports, or when walking briskly on flat ground or slightly uphill.
3. I have shortness of breath when walking on flat ground at the same speed as others my age.
4. I get shortness of breath even after light activity—for example, washing or dressing myself.
5. I have breathing difficulties almost all the time, even when resting.
Question 5. Sleeping
1. I am able to sleep normally; that is, I have no problems with sleeping.
2. I have slight problems with sleeping—for example, difficulty in falling asleep, or sometimes waking at night.
3. I have moderate problems with sleeping—for example, disturbed sleep, or feeling I have not slept enough.
4. I have great problems with sleeping—for example, having to use sleeping pills often or routinely, or usually waking at night and/or too early in the morning.
5. I suffer severe sleeplessness—for example, sleep is almost impossible even with full use of sleeping pills, or staying awake most of the night.

Question 6. Eating
1. I am able to eat normally; that is, with no help from others.
2. I am able to eat by myself with minor difficulty (for example, slowly, clumsily, shakily, or with special appliances).
3. I need some help from another person in eating.
4. I am unable to eat by myself at all, so I must be fed by another person.
5. I am unable to eat at all, so I am fed either by tube or intravenously.

Question 7. Speech
1. I am able to speak normally; that is, clearly, audibly, and fluently.
2. I have slight speech difficulties—for example, occasional fumbling for words, mumbling, or changes of pitch.
3. I can make myself understood, but my speech is—for example, disjointed, faltering, stuttering, or stammering.
4. Most people have great difficulty understanding my speech.
5. I can only make myself understood by gestures.

Question 8. Elimination
1. My bladder and bowel work normally and without problems.
2. I have slight problems with my bladder and/or bowel function—for example, difficulties with urination, or loose or hard bowel.
3. I have marked problems with my bladder and/or bowel function—for example, occasional “accidents”, or severe constipation or diarrhoea.
4. I have serious problems with my bladder and/or bowel function—for example, routine “accidents”, or need of catheterisation or enemas.
5. I have no control over my bladder and/or bowel function.

Question 9. Usual activities
1. I am able to perform my usual activities (for example, employment, studying, housework, free time activities) without difficulty.
2. I am able to perform my usual activities slightly less effectively or with minor difficulty.
3. I am able to perform my usual activities much less effectively, with considerable difficulty, or not completely.
4. I can only manage a small proportion of my previously usual activities.
5. I am unable to manage any of my previously usual activities.

Question 10. Mental function
1. I am able to think clearly and logically, and my memory functions well.
2. I have slight difficulties in thinking clearly and logically, or my memory sometimes fails me.
3. I have marked difficulties in thinking clearly and logically, or my memory is somewhat impaired.
4. I have great difficulties in thinking clearly and logically, or my memory is seriously impaired.
5. I am permanently confused and disoriented in place and time.

Question 11. Discomfort and symptoms
1. I have no physical discomfort or symptoms—for example, pain, ache, nausea, itching, etc.
2. I have mild physical discomfort or symptoms—for example, pain, ache, nausea, itching, etc.
3. I have marked physical discomfort or symptoms—for example, pain, ache, nausea, itching, etc.
4. I have severe physical discomfort or symptoms—for example, pain, ache, nausea, itching, etc.
5. I have unbearable physical discomfort or symptoms—for example, pain, ache, nausea, itching, etc.

Question 12. Depression
1. I do not feel at all sad, melancholic, or depressed.
2. I feel slightly sad, melancholic, or depressed.
3. I feel moderately sad, melancholic, or depressed.
4. I feel very sad, melancholic, or depressed.
5. I feel extremely sad, melancholic, or depressed.

Question 13. Distress
1. I do not feel at all anxious, stressed, or nervous.
2. I feel slightly anxious, stressed, or nervous.
3. I feel moderately anxious, stressed, or nervous.
4. I feel very anxious, stressed, or nervous.
5. I feel extremely anxious, stressed, or nervous.

Question 14. Vitality
1. I feel healthy and energetic.
2. I feel slightly weary, tired, or feeble.
3. I feel moderately weary, tired, or feeble.
4. I feel very weary, tired, or feeble, almost exhausted.
5. I feel extremely weary, tired, or feeble, totally exhausted.

Question 15. Sexual activity
1. My state of health has no adverse effect on my sexual activity.
2. My state of health has a slight effect on my sexual activity.
3. My state of health has a considerable effect on my sexual activity.
4. My state of health makes sexual activity almost impossible.
5. My state of health makes sexual activity impossible.

Handout References: