



FELLOWSHIP Didactic Portion: Section I

In this section, each question is worth 1 point each. There are 120 questions.

Anatomy & Physiology

- Parts of the brain and their functions
- Areas of the brainstem and structures you may find there
- Tracks - their functions/information they carry, start and stop locations and pathways
- Receptors and their functions
- Neurotransmitters and their functions and where/when you'd find them
- Basal ganglia – parts, functions of each area, neurotransmitters, direct, indirect and hyper-direct pathways, conditions that involve these pathways/areas

Attachment Styles

- The different styles in children
- The different styles in adults
- Development and integration timelines, ages, signs, etc

Differential Diagnosis

- What exam findings lead to certain diagnosis
- If we have a known issue in an area of the brain, brainstem, etc what can be the diagnosis
- The difference in brainstem, cortex, cerebellar, basal ganglia, etc disorders
- Being able to choose the most appropriate diagnosis based on some history and exam findings

Exam Techniques & Interpretations

- How to perform parts of a neurological exam for all parts of the nervous system
- Interpretation of exam findings
- Knowing the guidelines or requirements based on age for things like number of words known, when reflexes should be integrated, etc
- Knowing the difference between a central and peripheral lesion



General Knowledge

- Definitions of words like echolalia, seizure, graphesthesia, stereognosis, etc
- Knowing things like the frequency of the thalamocortical system, when the blood brain barrier reaches integrity, that children with ADHD have a 20-30% risk of also suffering from seizures, etc.

History

- Knowing what questions to ask in a history
- What signs and symptoms from the history can support diagnosis
- What signs and symptoms prompt you to do certain things during your exam

Patient Education

- Be able to advise patients on when children should meet milestones
- Be able to advise patients on when their child is ready for certain things like bringing solids into their diet
- Be able to advise patients on which dietary limitations they should employ

Primitive Reflexes

- Know where the in the brainstem the primitive reflexes come from
- Know at what age (gestational or later) that they emerge
- Know at what age they should be integrated
- Know what exercises help integrate them
- Know what signs or symptoms you may see when reflexes are not integrated (even in adults)



Right vs. Left Brain

- Understanding right or left brain traits or strengths
- Understanding right or left brain deficits or weaknesses
- Understanding what diagnosis or disabilities are more right or left brain
- Understanding exam findings that are indicative of hemispheric deficits
 - Example: During Romberg exam, patient falls to the right – this is indicative of a left cortex weakness (or any other hemispheric correct answer)
- Understanding what treatments are specific to each hemisphere

Pharmaceuticals & Nutraceuticals

- Knowing what drugs children with certain diagnosis can be on when coming to the office
- Understanding the possible side effects these drugs can have on children
- Know what supplement wise patients can be advised to take
- They are not being asked to know doses, methods of delivery, etc

Treatment

- Understanding what exercises are appropriate for what exam finding or diagnosis
- Knowing how to execute specific exercises or remediation
- Knowing which type of stimulus on which part of the body is appropriate to stimulate a specific part of the brain or hemisphere
- Knowing when certain treatments are appropriate or not
- Knowing the markers for advancement in leveled exercises
 - Example, what criteria must be met for a child to move from a level 2 bridge to a level 3 bridge
- Knowing what games are best for specific learning disabilities or diagnosis
- Knowing what types of other providers that doctors will need to refer patients out to in order to co-manage care
 - This can vary from country to country, but no doctor can do it all in some cases



FELLOWSHIP Cases Section: Section II

In this section there are 5-6 cases with 6-10 questions each.

Questions here will be marked to show they are either worth just 1 point, or are mark all that apply. For the mark all that apply questions, no point value will be shared. For each correct answer, examinees are awarded 1 point. For each incorrect answer, examinees lose 1 point. If a score is ever negative, points are adjusted after testing to reflect a score of Zero (0) for that question instead of the examinee losing points overall on the exam.

Cases

- A combination of all of topics above
- A case vignette is given with a background, history and exam findings
- For each case there is generally a combination of the following:
 - Interpretation of history
 - Interpretation of exam findings
 - Identification of the area of the brain/nervous system involved
 - A differential diagnosis
 - An at home regiment (exercises, treatments, etc)
 - An in office regiment (exercises, treatments, etc)
 - Dietary or drug/supplement recommendations
 - Any possible co-management information