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Answer

1: Immune responses in vaccinated mice were further investigated by measuring cytokine production. The type of immune response was determined by measurement of IFN-γ, a marker for T helper type 1 (Th1) responses, and IL-4, for Th2 responses. When you first become infected, your body launches its standard innate immune defense like it would for any virus. This involves the release of proteins called interferons that interfere with the virus's ability to replicate inside the body's cells. Interferons also recruit other immune cells to come and attack the virus in order to stop it from spreading. Ideally, this initial response enables the body to gain control over the infection quickly, although the virus has its own defenses to blunt or escape the interferon effect.

The innate immune response is behind many of the symptoms you experience when you're sick. These symptoms typically serve two purposes: One is to alert the body that an attack has occurred — this is thought to be one of the roles of fever, for example. The other purpose is to try and get rid of the virus, such as expelling the microscopic particles through cough or diarrhea. To infect a human host, viruses must be able to gain entry into individual human cells. They use these cells' machinery to produce copies of themselves, which then spill out and spread to new cells.

2: Subsartorial Canal also known as (The Hunter's canal, adductor canal) is an aponeurotic tunnel in the middle third of the thigh, extending from the apex of the femoral triangle to the opening in the adductor magnus, the adductor hiatus.It is 15cm long and serves as a passageway for structures moving between the anterior thigh and posterior leg.
The adductor canal serves as a passageway for structures moving between the anterior thigh and posterior leg. It transmits the femoral artery, femoral vein (posterior to the artery), nerve to the vastus medialis and the saphenous nerve – the largest cutaneous branch of the femoral nerve. The canal contains the femoral artery, femoral vein, and branches of the femoral nerve (specifically, the saphenous nerve, and the nerve to the vastus medialis). It consists of three foramina: superior, anterior and inferior.

3: Extraocular muscles are also referred to as the extrinsic (arising externally) or muscles of the orbit. There are 6 of these extraocular muscles that control eye movement (cows only have 4 of these), and one muscle that controls eyelid elevation. The position of the eye at the time of muscle contraction is what determines how the 6 muscles of the orbit are engaged. Four of the 6 extraocular muscles controls movement in the cardinal directions: north, east, south, west (or up, right, down, left). The other 2 of 6 extraocular muscles are responsible for counteracting head movements and adjusting eye movement accordingly. There is orbital fat that surrounds the sides and back of the eye which cushions it, allows it to move more freely, and functions to protect blood vessels and nerves as they pass through the rear of the orbit.

The intraocular muscles include the ciliary muscle, the sphincter pupillae, and the dilator pupillae. The ciliary muscle is a smooth muscle ring that controls accommodation by altering the shape of the lens, as well as controlling the flow of aqueous humor into Schlemm's canal.