

EXCHANGE ARTICLES

The Quest of the Fungus

BY J. JOHNSTON, Scotstoun, Glasgow, Scotland

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This vivid bit of description was submitted by a nurse probationer as an answer to the following test question put to a group of finalists: "Describe the method in which the blood circulates through the body, illustrating your answer by a rough diagram. What would be the effect on the lungs, liver and lower extremities should the valve between the left auricle and left ventricle cease to act? Explain this."—EDITOR.

I am a Vegetable Fungus and I inhabit the Country of Man. Lurking one day in the Left Auricle of the Heart I spied my natural enemy, the Red Corpuscle bathing in the Blood Plasma. None of his bodyguard, the White Corpuscles, were within his call, and seizing him I tried to destroy him.

As I was somewhat demoralized from long inactivity my enemy proved the stronger and escaped from me.

He followed a circuitous route, and I followed closely on his heels.

As briefly as possible I will describe our journey: I followed him through the Mitral Valve from the Left Auricle into the Left Ventricle, and from the Left Ventricle through the Semilunar Valve into the Arch of the Aorta. Here he hesitated, but as I gained on him rapidly he passed the Coronary Arteries and raced up the Innominate Artery. This great river divides into two in the Right Shoulder Province: The Right Sub-clavian Artery and The Right Common Carotid Artery. The former is the longer way, extending to the Palmar Arch and the rivers supplying the fingers, but it also gives off the Vertebral Artery, and here my enemy entered, making toward the Higher Provinces of the Head.

The rivers supplying the Left Provinces are in all ways, except one, similar to those supplying the Right Provinces, and our Vertebral Arteries enter the Capital of Man side by side.

In the Brain the two Vertebral Rivers combine with branches from another—the Internal Carotid, one of the two divisions of the Common Carotid, to form the Circle of Willis, the great reservoir which supplies the Brain, as the Capital city of Man is called.

In the Circle of Willis for some time I lost trace of the Red Corpuscle, but I finally tracked him to the Superior Longitudinal Sinus, one of the rivers which carries the overflow away from the City, and I chased him thence to the Left Internal Jugular Vein.

By this time he was becoming much exhausted, being a good-natured fellow who foolishly parted with his vital quality, Oxygen. I being one of the Great Bacteria Family which thrives on waste products, of which there were plenty in the river which carried us along, hoped to overtake and destroy him immediately.

Where the Left Internal Jugular Vein joins the Left Innominate Vein I cut off my enemy's flight. To my rage he again escaped, however, owing to the interference of a Leucocyte which endeavored to swallow me. When I had killed the latter, after a great struggle, the Red Corpuscle was out of sight in the Superior Vena Cava and nearing the Great Lakes of the Heart, where a continuous suction goes on.

I followed him into the Right Auricle and through the Tricuspid Valve into the Right Ventricle. Here his doctor was quickly in attendance and ordered him immediately away to the Right Lung to recover, and get more oxygen. After all this trouble, however, I did not intend him to escape, and I determined to follow. Having packed up the remains of the Leucocyte I had killed to devour at my leisure, I went along the Pulmonary Artery, and took its division to the Right Lung. Here I finally discovered the Red Corpuscle in the wall of an air-cell, strong, active as ever.

It was a disappointment, still I could afford to wait.

He left a short time afterwards by one of the capillaries leading to the Pulmonary Veins, and was carried safely to the Left Auricle of the Heart.

I had now reached maturity, and feeling anxious to settle down looked round and decided on the Valve between the Left Auricle and Ventricle. I called my house a Chorda Tendinæ.

Here I multiplied by the process of dividing myself into two, and very soon I was many, and a power in the Country of Man.

As we now required more territory and food to live on, we built fortifications on the Mitral Valve and levied taxes on all who passed, only allowing them to pass at our own pleasure. To my joy, this caused the Provinces of the Lungs to become very much impoverished, and there was distress in the Country of Man.

For a time there was an attempt to compensate the tax-payers, and fresh reinforcements were brought to the Left Ventricle, which was greatly enlarged, but by degrees we forced the defending forces back into the already overcrowded Pulmonary Veins, and thence to the Lungs.

Due to this overcrowding the Country of Man had not sufficient air to breathe. The fair Province of the Face became dark and ugly and the Capital City at times lost control of the Country altogether. The Liver, the great storehouse of Man, in the Middle Provinces, was next congested with the defending forces and as it was impossible to carry on its business in consequence, the Country of Man was faced with starvation.

The Lower Provinces were now involved, the overflow usually taken from them by the drainage channels was left to stagnate, as the channels were already overfull, until it became so great that it drowned every living thing. So the Lower Provinces were lost to the Country of Man.

I am now old but my days in the Country of Man have been many. Though it has been my life-work to destroy man, I must die with it unaccomplished, but I know with unbounded gratitude that what I have failed to do, my family, the Bacteria, will accomplish.