

Monks spots puzzle

In a certain monastery, ten of the monks have a disease which causes them to have blue spots on their foreheads but has no other symptoms. All the monks have taken a vow of silence, and there are no mirrors in the monastery, so nobody knows whether he has a blue spot on his forehead or not.

If a monk discovers that he has a blue spot on his forehead, he will have to leave the monastery by the end of the day, announcing this to all monks in the monastery. All the monks are perfect logicians — that is, they can instantly deduce all the logical consequences of any statement made to them — and they all know that all the other monks are perfect logicians.

One day, the Guru, who is known to be truthful, gathers all the monks together and announces "At least one monk in this monastery has a blue spot on his forehead." Nothing happens for nine days, but after some days, all the monks with blue spots leave. Why?

What information did the Guru provide to the Monks?

(Revised from: everything2.com/title/Monks+with+blue+spots+puzzle)