# Hiccup as a Challenge in My Father's Life: An Observation from Medication and Psychological Relaxation: A Case Study Report

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**Abstract:** The present article is going to highlight about my (investigator's) father who is suffering from hiccup since May 2019 till date. He is keeping under observation from medication and psychological relaxation. The purpose of this article is that one needs to understand about hiccup which is occurring across the globe but remain a poorly understand phenomenon caused by involuntary, repetatite contractions of the diaphragm and, in many cases, the intercostals muscles. The main objectives of the present article is:

- 1. Using medication trying to stop hiccup in initial phase;
- 2. Along with medication and relaxation, the client is trying to bring a state of calm mind and a body free from tension hiccup;
- 3. Trying to find out which diet can give more comfortable to the client under hiccup condition;
- 4. To observe the urine production, fart, feces excretion from the client. Does it relate to hiccup formation?

Trying to find such objectives, the investigator studied a case study of 88 year old who is suffering from hiccup nearly five months till date. From this hiccup case study, the investigator found that hiccup can be controlled using medication initially and if not given the medicine, recurring hiccup came back. From this study, the investigator found that relaxation and medication is working together, then later, medication was removed and the client is able to control the recurring hiccup of his own. With regards to diet, a spicy food, difficult to digest food to the client has been avoided. Again the investigator found that from this case study it seems that if urine, fart and feces are not produced, then hiccup formation has been observed oftenly. In the conclusion part, the investigator felt that caretaker should not leave the client alone when hiccup is going on.

**Keywords:** Hiccup ,relaxation, medication, diaphragm, intercostals muscles.

#### I. Introduction

Hiccups are familiar to everyone but remain poorly understood. From the English Oxford Dictionaries, Hiccup can be defined as "An involuntary spasm of the diaphragm and respiratory organs, with a sudden closure of the glottis and a characteristic gulping sound." The medical term for this condition is "Singultus", which can be translated from Latin as "to be caught in the act of sobbing." They are usually transient condition that objects almost everyone in their lifetime. The coordinated contraction of the inspiratory musculature leads to a rapid intake of air that is, within a few milliseconds, interrupted by closure of the glottis. It is this that results in the characteristic sound, the "hic" in hiccup, between four and sixty times a minute. When a hiccup forms, it is because of a sudden, involuntary contraction of the diaphragm at the same time as a contraction of the voice box, or larynx, and a total closure of the glottis. This results in a sudden rush of air into the lungs and the familiar "hic" sound. The glottis is the middle part of the larynx, where the vocal cord are located.

# II. Purpose of this paper

The purpose of this article is that one needs to understand about hiccup which is occurring across the globe but remain a poorly understand phenomenon caused by involuntary, repetatite contractions of the diaphragm and, in many cases, the intercostals muscles.

# III. Methodology

Sample: A case study report, nearly 88 year old, Male.

Case profile: Nearly 88 year old is suffering from hiccup since May 2019 till date.

# IV. Design

Longitudinal design: observing the patient's health improvement (i.e. Hiccup –either control or not) medication along with psychological relaxation.

# V. Instruments

#### **Case Study Method:**

An outgrowth of psychoanalytic theory, the clinical or case study, method brings together a wide range of information on one person, including interviews, observations, test scores, and sometimes psycho physiological measures. The aim is to obtain as complete a picture as possible of that person's psychological functioning and experiences that led up to it. Case studies provides rich, detailed accounts of significant events in an individual's life. The case study is mainly descriptive, and its data are qualitative. It is the least systematic and least controlled research method.

# Let's display the case profile of the patient:

A case study has been selected for this article. The patient is nearly 88 years old. The patient is referred to the Jiban Hospital, Kakching on 5th May 2019 due to hiccup and then shifted to Shija Hospital on 6<sup>th</sup> May 2019 with a brief history of loss of appetite, hiccup, and generalized weakness since the last five days. No history of fever, vomiting, breathing difficulty or trauma. He is a known case of hypertension (recently detected). On clinical examination, he has BP-150/90 mm Hg, Pulse-81 per minute, SPO2-98F, temperature-98, Chest-clear bilaterally, CVS-S1S 2 heard, per Abdomen-soft montneder. During the cpurse in hospital, he was admitted with the above complaints. Blood investigation report revealed suggestive of hyponatremia. ECG showed Mobitz Type 1 block. Cardiologist consultation sought. He was advised 24 hours Holter monitoring and to avoid negative chronotropic drug. On clinical evaluation, supraclavicular lymph nodes was palpable. FNAC (fine needle aspiration cytology) suggested for the same. Chest X ray showed bilateral hilar lymphadenopathy and bilateral infiltrate. So,HRCT thorax suggested. However, party requested discharge. He is being discharged on request on 7<sup>th</sup> May 2019. Treatment is conservative. The final diagnosis from the hospital is, "MObitz Type 1 Block, essential hypertension; hiccup under evaluation." As i observed the test done by the hospital, sodium, urea, is little bit below the normal value. From the radiology reports, prostate is enlarged measuring 5.2 \* 4.1\*4.1 cm. volume 46 cc. Urinary bladder is empty.

The patient, named as NBS was born at Kakching. He is a retired teacher. He has seven children. He is nearly 88 year old. He joined as a matriculate teacher at kakching higher secondary school on 1956. He was promoted as Intermediate Teacher and passed out B.A. on 1964 and during 1965. He has been promoted as graduate teacher. He passed out his B.Ed on 1973 from Regional college of education, Utkal University, Bhubaneswar, Orissa. During 1980, he has been promoted as senior graduate teacher. In 1990,he has been promoted as selection grade graduate teacher. During 1993, he has been retired from service (31.10.1993). he became founder headmaster, Kakching public school, Kakching. He served as secretary, Kakchingf Khunyai Leikai L.P. school (private) and kakching junior high school. (AIDED). He served as President, Kakching Wairi high school (private) and P.R. English school (private) (1979 and 1992). He served as GB member,kha Manipur College, Kakching (1972), Kha Manipur Hindusthani Sangit Mahabidyalay, Kakching. He had been honoured by Representative of Lois (ROL) Kakching for the Immense help given to it in its struggle to include the original people of Kakching in the Scheduled Caste Category. He served as Advisory Board, Patron, member, Library and Information centre, Kakching. He had been honoured as a Teacher by Lions club of Imphal in 2008. He had been the recipient of Naorem Amuba Singh teacher award,2014. He passed out his Xth class from Johnstone Higher Secondary school.

## VI. Result

The patient was assessed by means of a through clinical examination aimed at detecting thoracic, abdominal known to cause hiccup.

#### VII. Treatment

Medication: Baclofen was prescribed as the first step of hiccup therapy. Then many other medication based on (SOS)like librax,frustum was given to the patient along with doses given by doctor. At last Chloropromazine was given to the patient from 26<sup>th</sup> May 2019. Patient's family members gave chloropromazine to the patient until he can able to control hiccup for his own way. At last stop giving chloropromazine from 2<sup>nd</sup> August 2019 but other vitamins are going on till date.

# VIII. Treatment With Medication Along With Relaxation

Along with medicine, the investigator started to do relaxation to the patient. Here, simply to relax his mind from overthinking. So i told to the patient to memorize some beautiful scenario which he enjoyed in his earlier period of life or i usually say to the client to imagine a beautiful scenario with a beautiful garden and imagine the beauty to the garden. The moment when the patient encountered hiccup, shortness of breath, i can observe and i told very oftenly to do deep breathing i.e., inhalation and exhalation. While doing such process, if encountered hiccup, let it be, it will be OK very soon. Please focus only in your breath slightly closing your eyes, if you want to remember God's name which he likes, he can do that. Again i gave relaxation like joking to my father i.e., asking his one of the most joyous period in his life; sometimes i am taking his name (not saying father), i said i am your mother, then i started asking to the patient, where is my daughter-in-law? Have you seen today? That brought him laugh. This is the one i like most i.e., trying to laugh loudly from the patient's face. Another observation i found to my father is that, "small sound made him uneasy feeling." I noted it down and i explained the moment when he felt such moment. Here again, i told, "do breathing in and out slowly and regularly along with closing your eyes taking the name of God."

Whenever any patient encountered some life challenges problem, he/she needs to give family support,negative thoughts have to be reduced,have to understand what the patient wants to say something. I found my father's hiccupping 35 times within one minute during August 2019.sometimes i asked him to share your beautiful moment with family members who have surrounded to him. I am trying to show to him that how do you feel after you shared your good memories. Sometimes i did pranayam to the patient. Sometimes i did role playing in front of him etc. So the main logic is that i am trying to bring an enjoyable mind to him and i am trying to show to him that how much he has valued to us.

#### IX. Treatment with diet

I did diet checking to my father. I gave oats,banana milkshake,bread,eggs,protein biscuit etc.day to day basis. Spicy foods are totally avoided. Again,hiccup came when stomach is empty,as well as after the food has taken up. Sometimes no hiccup is followed after food. So with regards to diet, no spicy foods and simple food is more favourable to the client. When the patient has overthinking, no feeling of diet can be observed to the patient.

#### **X.** Treatment with Urine, fart and feces to the patient

Here urine production, fard excretion, and feces production has to be observed carefully because from such things hiccup can be formed. (i.e.,unable to take out gases from the anus,gases came up towards mouth along with hiccup and sometimes leads to vomiting also). Likewise urine and feces can form hiccup. If the hiccup patient does not produce feces, more chances to form hiccup due to hard feces inside the body; so try to take out hard feces from the hiccup patient.

#### XI. Discussion

In my case study, Bacoflen was used initially, then stopped due to SOC. Again, all the medication was stopped. Then gave Chloropromazine (a small piece, one tablet is divided into four pieces and gave twice a day) that leads to relief from the hiccup. Then along with chloropromazine some kind of relaxation techniques was added to the client, then diet observation to check it out which food is comfortable to the client. So just leave spicy food to the hiccup client. In this case study assessment could be made of the success of treatment was followed up. In the following, "complete resolution" is defined as complete disappearance of hiccup, whereas "treatment failure" corresponds to a complete lack of change in hiccup frequency or intensity. "partial resolution" denotes either hiccup transformation from continuous to intermittent, or a patient-reported decrease infrequency of about 50%, or a patient-reported significant change in hiccup perception (e.g., disappearance of the painful nature of hiccups,or their markedly decreased intensity). The cases i picked up has some kind of partial resolution. I will not say it is a treatment failure. My observation to my father's hiccup is that hiccup can be controlled without medicine but the patient could not walk alone right now due to weakness. Again, the patient has some memory problem i.e., could not restore the encoding the incoming information i.e., STM problem, it seems to me. The information what i gave him have forgotten after some seconds.

In my view hiccup is a very complex phenomena. The moment when hiccup occura, i started counting beating of hiccup i.e., how many rounds of hiccup. I mean recurring hiccup. I observed in my father's hiccup around 1 to 13 times when hiccup occurs. When i noted in one minute it came around 28 to 35 hiccup. Hiccup came after breakfast, after lunch and dinner and sometimes i noticed that no hiccup after breakfast, lunch and dinner also. Then, i noted when recurring hiccup occurs nearly 2 hours after breakfast, lunch and dinner. Sometimes i noticed hiccup occurs just after breakfast, lunch and dinner. When such recurring hiccups is visible, then, i can give more attention to my father because it automatically came "hic" sound due to the closure of glottis. To release "hic" sound, i gave pressure on the back side of the body (i.e., on the back line of esophagus). When "hic" sound occur, my father could not produce sound clearly. When i call him and at the same time i gave beating at the back of the body and i started asking to him, "is it ok right now? If he said yes, clearly, then stop beating on the back side of the body (below the neck side). I noticed that after the hic sound was removed, he started sneezing. Another i noticed that when recurring hiccup occurs,he is difficult to produce urine and sometimes,in case,if produced urine,then wet the bed because he is sleeping at that time. During recurring hiccup, it is good for him to sleep because his body is relaxing and hiccup has gone away from him. So,here i am trying to relax his mind sothat he can sleep during recurring sleep. With regards to diets,i started noticing diets of my father. Initially family members gave the hiccup medicine. Later family members have decided that if he can able to bear the hiccup without medicine, then, family members stop giving hiccup medicine. Here family members convinced about the medicine having side effects of weakness. From 2<sup>nd</sup> August 2019 family members stop giving hiccup medicine even though recurring hiccup occurs. During breakfast i gave foods like oats,egg,banana and apple milk shake,bread,poha etc. Here keeping eyes on protein, sodium, carbohydrate etc. Due to heavy eating of breakfast, i usually gave a gap of five to six hours between breakfast and Lunch. During this period, if he likes something, just give ORS (powder one) or only simple water to drink. (here caretaker needs to check BP regularly). During Lunch time, sometimes i gave boiled one i.e., beans, cauliflower, squash, cabbage, dal, ice-cream with apple and banana and rice mix together; aloo pakoura (not too much, if no rice has responded). These lunch food gave alternate day depending upon the patient. For Dinner, sometimes i gave only banana milk shake when my father has not accepted any food. Otherwise i gave oats (two to three spoons) with one banana and one egg. The diets of hiccup is depending on the condition of the patient also. With regards to urine, fart and feces have a strong connection to hiccup in my obswervation. I took hiccup is a very complex phenomena. During hiccup never leave the patient alone because during hic sound external ppl is needed to beat on the back of the body ( i mean pressure sothat muscle contraction will go) sothat closure of the glottis will open and allow the patient to inhale in regular mode. Please donot give too much spicy food to the hiccup patient. Again just try to find out which food is most favourable to the hiccup patient ( i mean the food he likes before hiccuip.

## XII. Conclusion

Hiccup is a very complex phenomena. From my case study i would like to suggest:

Never keep hiccup patient alone when the hiccup is occurring/going on;

Please check out how many times hiccup has occurred continuously when hiccup is going on or within one minute how many hiccups have occurred and observed the patient's level of tolerance of hiccup or patient's way of coping;

During the hiccup period, allow the patient to bear his/her hiccup if he/she can do;

During hiccup is occurring, check out how often the patient does urinate, and is the patient able to produce fart and could patient able to produce feces of his/her own without any help? My observation of my patient is still going on. Now he can able to control his recurring hiccup but still weak (i.e., here patient is unable to do work as an independent way like walking but with caretaker's help he can do). Do hope will better in near some months.

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