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RESEARCH ARTICLE

VISCERAL MANIPULATION EFFECT ON LIVER ENZYMES WITH CEREBRAL PALSY PATIENT

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Abstract

Background: Cerebral Palsy [CP] child often suffer from seizures, so anticonvulsants drugs is a treatment choice and others using them as a prophylaxis if there is suspicion about increasing possibility for having one and commonly those list of drugs have an impact on liver function if there is long term of their huge doses due to mal abuse or any other cause here come the need for liver enzymes monitoring.

Material and Method: The study was done three children aiming to reduce their liver enzymes as they were on abnormal value as a cause of anti-epileptic drug we use visceral manipulation techniques especially liver technique investigation using liver enzymes as Alanine Aminotransferase and Aspartate Aminotransferase.

Results: We found dropping with their value to normal ratio after 10 min with the visceral manipulation techniques the approach is done for three times a week for three month.

Conclusion: The study concluded that treatment of the liver only is, at best short. Visceral techniques reduced the liver enzymes for those children who suffered from abnormal ratio.

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Introduction:-

Cerebral Palsy [CP] is a group of permanent movement disorders that appear in early childhood.¹ Symptoms include poor coordination, stiff muscles, weak muscles and tremors.¹ There may be problems with sensation, vision, hearing, swallowing and speaking.¹ Often babies with CP do not roll over, sit, crawl or walk as early as other children of their age.¹ Other symptoms include seizures and problems with thinking or reasoning, which each occur in about one third of people with CP.¹ Epileptic seizures associated with brain damage are generally difficult to control. The patients with CP and epilepsy treated with anti-epileptic drugs, 33 [53.2%] were free of seizures the majority of them on monotherapy.² Communication is vital to health and good function. The body has built up some amazing methods and tissues and discovered consider that movement restrictions negatively impact on communication by their chemical, neural, mechanical which affecting homeostatic balance remove or reduce these movement barriers and body will naturally reorient itself towards health and better functioning.³

Visceral Manipulation is different from many of the reflex systems that attempt to affect organs. The practitioner is not pressing on a distant reflex point, such as a neuro lymphatic, hoping to improve lymphatic drainage. The practitioner is directly working on the fascia surrounding the organ, hoping to improve mobility and visco-elastic property.⁴

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Material and Method:-

Patients from CP were received in my clinic. All three were under anti-convulsants drug therapy. One [a] was 12 years old hypotonic, second [b] was 10 years old diaphragic girl and third [c] was also 10 years old diaphragic boy. Without any investigation of liver, they were under drug therapy last 1 year. Their tiredness increases day by day and also abnormal gut. They were pale day by day and their urine colours were also change. After proper liver investigation, increase liver profile enzymes were noticed.

After proper assessment, we started visceral manipulation techniques for 10 minutes for three times a week for three month. Push the central part of the liver postero-superiorly; it should move 2 cm in the direction of push. This manipulate hepatorenal ligament by applying the same push towards opposite direction of the trunk bending will manipulate right and left triangular ligament and also lifting inferior border of liver with sudden fall will manipulate the coronary ligament. Patient is in supine position and place the right hand over the hepatic region and fingertips are above xiphoid sternum, points towards left triangular ligament and palm on the lateral part of R9-11 over the right lateral aspect of the liver. To palpate the motion during expir phase, hands follow the convexity of the ribcage and in frontal plane; hands rotate from right to left in a counter clockwise motion. To treat or release the area of left tension of hepatic flexure of the colon. Then release the falciform and stomach triangular ligament through the finger which are pushed superiorly and laterally. Now work on the entire liver. Place one hand medially and other laterally and move the fingers on different areas.

Now we stand behind the patients and place the palms of our hands on the antero-lateral extremities of R7-9, with the pads of fingers subcostal. Push the ribs antero-inferiorly and medially. Now emptying the gall bladder. Place the patient in a seated position and stand behind him with the fingers subcostal just lateral to gall bladder. Flatten the fingers well against inferior side of the liver. The superior duodenum is not sensitive to palpation where the gall bladder is to force it to contract and expel the bile, push the fingers rhythmically with moderate amount of force in short 2-4 cm strokes superior, posterior and medially along the axis of gall bladder. These techniques are performed in supine position. Fingertips should be placed as close to the left triangular ligament. Hand on the ribcage and its ulnar aspect onto the abduction. Encouraging the part of motility cycle which is easiest and has the greatest amplitude.^{5,6}

Results:-

After apply the visceral manipulative session patient having improvement after three month treatment protocol. Improvement in values of the liver enzymes was done after liver manipulation techniques as the liver enzymes reach almost normal.

Discussion:-

Visceral mobility is the movement of the viscera in response to external forces. Voluntary movement, or involuntary movement, such as diaphragm with respiration of the heart beating, create the use external forces that push and pull on the viscera. There are a few basic concept about visceral manipulation. All organ have motility and mobility. The mobility of an organ is the way it move—a mechanical concept.

The viscera have an intrinsic active motion which we call motility. Visceral motility is perceptible to the hand but requires an educated sense of touch. It is kinetic expression of tissue in motion. For the most part, when assessing the viscera, each organ move in phases towards and away from the axis of body. Expir is the movement of an organ closer to the median axis and inspire is the movement of an organ away from it.

When applying visceral manipulation, initially started by general listening and local listening. This is where, in a matter of seconds, an assessment is made as to where the body is asking for attention once the fix the patient problem use the any other technique which is suitable for the patient like motility, mobility or any organ specific approach.

After proper physical assessment of patient apply the direct approach, indirect approach and correct the pattern of abdomen sphincter. Depending on the patient history and physical findings, the physician may choose to introduce forces in any of the above styles(3). The rationale for implementing these relates to the measure components of the dysfunction and the principal being utilized to attain the most significant improvement(5). direct approach means treat the affected part directly through the mobility method. Indirect approach means release the fascia around the

affected organ . The indirect technique involves using the body as a long lever to influence the mobility of an organ (thus the treatment is not direct). An example of an indirect technique would be using trunk rotation in supine to address a kidney.

“A system of diagnosis and treatment directed to the viscera to improve physiologic function ; typically the viscera are moved toward there fascial attachments to a point of fascial balance ;also called ventral techniques .”

Jean-Pierre Barral, an osteopath practicing in Grenoble, France, the body's vital viscera are like a beautifully complicated timepiece, each part in subtle but perpetual motion relative to the others. “In a single day, your internal organs move 30,000 times,” he says. “Your liver alone travels 600 m.” Problems arise, according to Barral, when a trauma or malfunction puts the mechanism out of alignment. “An organ that loses I mobility can throw the whole organism out of whack,” he says. “Our task is to help it get back on track.” To that end, Barral, 56, has spent nearly three decades developing the therapeutic technique he calls visceral manipulation. Here's how it works: using only his hands, Barral coaxes the kidneys, liver, stomach and other soft tissues back to their natural movement by applying soft pressure to the abdomen, thorax and urogenital areas. In this way, he claims to have successfully treated ailments ranging from chronic back and joint pain to indigestion, infection, incontinence, migraines and even impotence and sterility . The liver is the storage location for fat-soluble vitamins and handles cholesterol homeostasis. It stores iron and copper. It plays a role in hematology with clotting factor and protein synthesis. The liver plays a role in heme breakdown into unconjugated bilirubin and conjugates it. . ALT and AST are important enzymes in gluconeogenesis, with ALT being more specific for the liver as AST is found in a variety of tissues. Alkaline phosphatase (ALP) can be found in the bone as well as the biliary tree, so it is not as specific, but when used in combination with the rest of the panel, it supplies evidence of hepatocellular injury. In particular, elevated ALP signals damage to the lining of the biliary tract.

For the osteopath this means that during treatment of the liver attention should be given not only to the neurological relationships but also to related hormone producing organs such as the adrenal glands, the pancreas and the kidneys as well as addressing diet. Treatment of the liver only is, at best short. Local stimulation (what osteopaths probably do during visceral techniques for the liver cause increase glucose and lactate output and hemodynamic action.

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