International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.9756/INTJECSE/V14I5.988 ISSN: 1308-5581 Vol 14, Issue 05 2022

A Case Report on Management of 8-Year-Old Child with An Arteriovenous Malformation and Haemangiomain The Right Gluteal Region.

Nandini Khandare[1], Dipali Ghungrud[2], Sarika Khadase[3], Shivendra Singh[4], Ranjana Sharma[5]
1] G.N.M. 3 rd year, Florence Nightingale Training College of Nursing. Datta Meghe Institute of Medical Science (D.U.) Sawangi (M) Wardha, Email: - nandinikhandare601@gmail.com
2] Nursing Tutor, Florence Nightingale Training College of Nursing Sawangi (Meghe) Wardha, ghungruddeepali@gmail.com.
3] Vice-principal, Florence Nightingale Training College of Nursing Sawangi (Meghe) Wardha, sarikaselsurkar@gmail.com
4] Research Consultant, Department of Research and Development, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences, Wardha.
5] Professor cum H.O.D.,Department of Medical-Surgical Nursing, Smt. Radhikabai Meghe Memorial College of Nursing, Datta Meghe Institute of Medical Sciences, Sawangi, Wardha, Maharashtra.

ABSTRACT:
Introduction: A birthmark identified as a haemangioma. It can be bright or dark in colour. In the first or second week of life, it can also occur. It resembles a rubbery lump brought on by too many blood vessels in the skin. Anywhere on the body, including the face, scalp, chest, and back, can develop haemangioma. Haemangioma is an abnormal collection of blood vessels in the skin or internal organs.
Case presentation: An eight-year-old girl was admitted to the emergency room complaining of pain over recent lesions in her right gluteal region. As narrated by the Patient's mother-child had a small lesion at birth which was gradually increasing in size, the swelling was with pain and inflammation of the surrounding area, the Patient had under gone embolization of the right iliac artery one month back, now there was pus discharge and in the duration of the local site and the Patient was hence brought for further management. The lesion was about 5.1 × 10.7 × 13 cm in size at the onset first appeared. No one in her family has ever complained about a similar illness condition. Physical examination of the Patient revealed fluid flowing from the lesion. After the Patient's diagnosis of angiofibrolipoma was confirmed, the Patient was referred to the surgical department for further therapy. Histopathological analysis of the skin biopsy indicated this condition**.**
Conclusion: One of the frequent side effects of hypervascular venous malformations is the arteriovenous malformation haemangioma. Its severity plays a significant role in determining the likelihood of surviving in poor health, as well as the hazards to bodily processes.

KEYWORDS: Embolization, hypervascular, venous malformations, haemangioma.

INTRODUCTION:

A benign vascular tumour called an intramuscular haemangioma commonly affects the lower extremities. A typical benign tumour is known as a soft-tissue haemangioma and can form intramuscularly, subcutaneously, or on the skin. Although the cause of haemangioma growth within a muscle compartment is often developmental, some cases have been linked to blunt trauma to the soft tissues[1].A benign vascular tumour called an intramuscular haemangiomacommonly affects the lower extremities. The gluteus medius muscle was the site of an unusual intramuscular haemangioma; less than 1 per cent of all haemangioma are intramuscular haemangioma, considered a rare malignancy. Typically, the clinical presentation does not resemble a typical vascular tumour. Preoperative diagnosis is highly challenging, and the problem is frequently only found during surgery or after Histopathological analysis[2,3].
Nearly every area of the body, including the skin, subcutaneous tissue, intramuscular, splanchnic tissue, and skeletal, can develop haemangioma, a type of tumour originating from vascular tissue. The majority of deep intramuscular tumours, which are more prevalent in people under the age of 30, are intramuscular haemangioma, which accounts for lower than 0.8 per cent of all haemangioma[3]. Sometimes the intramuscular haemangioma may be asymptomatic in the body. At first, it was typically asymptomatic. When a haemangioma tumour enlarges, it may put pressure on nearby muscles and nerves and push them, resulting in a variety of indications and symptoms. Any area of skeletal muscle tissue can develop clinical abnormalities, however the lower limbs are more frequently affected. It is more difficult to control and treat gluteal intramuscular haemangiomas that are larger[4]. Since the early symptoms of an intramuscular haemangioma are non-specific and not apparent, it may be difficult to recognize them and determine an accurate diagnosis. Compared to other

imaging modalities, magnetic resonance imaging may offer more concise information about the nature, origin, and size of the lesion in a patient with a soft-tissue mass suspected to be a haemangioma[1,2].

CASE PRESENTATION:

This case includes an 8-year-old female child. A known case of post-operative haemangioma has come for further management at tertiary rural hospital Wardha. As narrated by the parents, the child had a small lesion at birth which was gradually increasing in size. The swelling was associated with pain and inflammation of the surrounding area. The Patient had undergone embolization of the right iliac artery one month back now, there was pus discharge, and induration of the local site and the Patient was hence brought to a Tertiary rural hospital for further management.

Physical examination: On admission, the Patient was afebrile, HR -88 beats/ min, RR-24 breaths/min; on systemic analysis: Cardiovascular system-s1s2 sound heard, no murmurs, per abdomen - soft non-tender. By central nervous system, examination child was fully conscious.Andshe was oriented to time, place and person.

Investigationswere done haemoglobin -10.8 gm%, Platelets count were -3.92, Hematocrit-31.2, TLC-13300, urea-15, creatinine-0.2, Serum sodium-146, serum potassium -4.6.Patient was started on Inj Ceftriaxone, Amikacin, metrogyl, Pantoprazole and Emset. A plastic surgeon call was done for right gluteal A.V. malformation and advised for local site colour Doppler. I.R. call was done, and angiography S.O.S. embolization. A wound culture wassent, and the Patient was shifted to the PICU as there was active bleeding in the right buttock and advised for P.R.C. Transfusion. P.R.C. transfusion of 1 pint was done, and it was uneventful. The culture was sent, and a sample of pseudomonas was sensitive to meropenem, so Amikacin was omitted, and meropenem was added.I.R. call was again done for embolization and debridement and sent to the Patient the next day for Doppler. Wound dressing was done, and 100 ml blood loss was present. The Patient was again transfused with P.R.C., which was uneventful. The Patient was shifted out of the Paediatric intensive care unit. The Patient was put on Inj. Vancomycin and linezolid, tab pregablin along with Inj meropenem, Syp calcimax, syp cremafin and Vit. D3 sachets.

Preoperative care: Under all aseptic precautions and general anaesthesia, painting and draping were done, the Patient kept in the prone position, and the slough was removed over the right gluteal region .sterile dressing with Vaseline, and betadine has done .procedure uneventful, Patient shifted to ward .specimen sent for culture and Histopathological examination. Wound debridement was done until fresh edges were obtained until muscle was done under general anaesthesia with blood loss of 250 ml. antibioticInj Ceftriaxone was started Patient was shifted to the PICU. As the Patient had no fever spike and no fresh issues post-operatively, she was moved to the ward and was continued on Inj—Ceftriaxone, Amikacin, metrogyl, and tramadol. A surgery call was done and advised to start septran tablet, stopinjectable, high protein diet.

Dietary management:A dietician call was given for diet and advised 1800 kilo calories with 26 gm of protein, low fat and high fibre. A cardiopulmonary respiratory physiotherapy call was done and advice was given for increasing the range of moments (R.O.M.) within available range and positioning. The Patient was started on syp calcimac, Vit D3 sachets, tab. Ultracet, tab. limcee, and tab. Multivitamin. The Patient complained of fever, so a complete blood count was sent Hb-10.5ngm %, TLC-6700, platelets-3.03 lack of RBC -3.89, HCT-31.patient was started on Inj. Augmentin and pantoprazole as the Patient had fever spikes. A blood transfusion of 130 ml P.R.C. over 3 hours has been done.For low haemoglobin, blood transfusion was again done with 1 unit of P.R.C. and was uneventful. The Patient was posted for flap reconstruction under general anaesthesia. Post reconstruction patient was shifted to the PICU and was continued on Inj meropenem,tab.septran, Inj pantoprazole, Inj emset, Inj Paracetamol,syp. Calcimax,tab. limcee. Patient was shifted to the ward on the next day and was advised to continue same treatment. The Patient was started on a tab of loperamide. A urine culture was sent, and the result revealed that there was nobacterial growth in the urine. A patient has been started on itraconazole.

Dressing of the wound site was done, and the catheter was changed. The Patient was started on syp—Cefpodoxime along with the current treatment. Again urine culture was sent, and no red blood cells but plenty of pus cells and sensitivity to tigecycline and Colistin. The Patient was started on Colistin.A physiotherapy call was given, and advised for actively assisted heel slides with end-range stretch were advised. Urinary routine and microscopic examination were done, and plenty of pus cells were seen.

Due to overall expert medical and surgical management patient's condition was improved.

DISCUSSION:

The most common area to develop a haemangioma is the head and neck area, which is the most prevalent soft tissue tumour in children (about 60% of cases). Abnormal growth of blood vessels, known as a haemangioma, can develop in any vascularized tissue, including the skin, subcutaneous tissue, viscera, muscle, synovium, and bone. However, they do not spread to avascular tissue like cartilage. Haemangiomas are classified as hematomas by some, while neoplasms by others. The skin or subcutaneous tissues are where they most frequently appear.

Visceral haemangioma is far less frequent but can harm your organs. Deep soft tissues and bones are affected, as well. Haemangiomas are linked to other illnesses[5-14].

The present case is a known case of post-operative haemangioma that has come for further management at tertiary rural hospital Wardha. As narrated by the parents, the child had a small lesion at birth which was gradually increasing in size. The swelling was associated with pain and inflammation of the surrounding area. The Patient had undergone embolization of the right iliac artery one month back now, there was pus discharge, and induration of the local site and the Patient was hence brought to a Tertiary rural hospital for further management. After all investigations, the Patient was posted for flap reconstruction under general anaesthesia. Now Patient's condition is fair.[15-21]

An author of this case report made reference to an intramuscular haemangioma, a benign vascular tumour that might occasionally affect the lower limbs. A lumbar disc herniation that manifested as an intramuscular haemangioma in the gluteus medius muscle was diagnosed. A 36-year-old woman was admitted to the hospital with incidental and infrequent soreness over her left buttock.After receiving the lumbar disc herniation diagnosis, she had additional therapy. Despite the fact that her discomfort had only slightly subsided, she soon experienced a relapse; M.R.I. and X-ray revealed a mass in her gluteus medius muscle. The mass was removed since it was thought to be a malignant tumour. And an intramuscular hemangioma was the final classification.After that, the Patient's pain vanished completely and didn't return. Since patients with intramuscular haemangiomas typically show no particular symptoms, this tumour is occasionally incorrectly identified. The diagnosis should be promptly reevaluated when an effective and satisfactory treatment result is not attained[22-24]. Now, after treatment of medical and surgical management patient is stable.

CONCLUSION:

Even though muscle fibrosis is the most common cause of a snapping hip, intramuscular haemangioma should be included in the differential diagnosis.

A case of an 8-year-old female child. A known case of post-operative haemangioma has come for further management at tertiary rural hospital Wardha. After surgical and medical treatment, her health status improved.

ETHICAL APPROVAL: Not applicable

PATIENT INFORM CONSENT: While preparing a case report for publication patient's informed consent has been taken.

CONFLICT OF INTEREST: The author declares that there are no conflicts of interest.

FUNDING: Not applicable

References:

1. Sobh AH, Brown L, Moore DD. Intramuscular hemangioma after total hip arthroplasty: an iatrogenic aetiology. Arthroplasty Today. 2018 Dec 1; 4(4):417-20.
2. Li Y, Chou K, Xiong J, Zhu W, Yu M. easily misdiagnosed intramuscular hemangioma: a case report. Journal of International Medical Research. 2020 Dec; 48(12):0300060520966897.
3. Sunil TM. Intramuscular hemangioma complicated by a Volkmann's like contracture of the forearm muscles. Indian paediatrics. 2004 Mar 1;41(3):270-3.
4. Goyal S, Sharma PK, Goyal R, Rashid A. An Adult Male Presenting with a Left Gluteal Region Hemangioma–An Unusual Site. Indian Medical Gazette. 2015 Mar:123.
5. Lee SK, Kwon SY. Intramuscular cavernous hemangioma arising from masseter muscle: a diagnostic dilemma (2006: 12b). European Radiology. 2007 Mar; 17(3):854-7.
6. Rasheed, A., Acharya, S., Shukla, S., Kumar, S., Yarappa, R., Gupte, Y., Hulkoti, V., 2020. High-Sensitivity C-Reactive Protein in Metabolic Healthy Obesity (MHO). JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 443–447. https://doi.org/10.14260/jemds/2020/100
7. Rathi, B., Rathi, R., 2020. Quantitative Analysis of Medicinal plants used by the Traditional healers of Karanja block of Wardha district for treating Musculoskeletal disorders. INTERNATIONAL JOURNAL OF AYURVEDIC MEDICINE 11, 175–183.
8. Rathi, C., Chandak, Manoj, Modi, R., Gogiya, R., Relan, K., Chandak, Madhulika, 2020. Management of separated endodontic instrument: 2 case reports. MEDICAL SCIENCE 24, 1663–1668.
9. Rathi, C.H., Chandak, Manoj, Nikhade, P., Mankar, N., Chandak, Madhulika, Khatod, S., Motwani, N., Jaiswal, A., 2020. Functions of Root Canal Sealers-A Review. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 1454–1458. https://doi.org/10.14260/jemds/2020/317

10. Rathi, R., Rathi, B., 2020. Application of Ayurvedic Principles in Prevention and Management of Behavioural Problems in Children. INTERNATIONAL JOURNAL OF AYURVEDIC MEDICINE 11, 636–643.
11. Rathi, R., Rathi, B., Khatana, R., Sankh, S., 2020. A Case Study on Management of Rett Syndrome by Wholistic approach. INTERNATIONAL JOURNAL OF AYURVEDIC MEDICINE 11, 351–357.
12. Rathi, S., Nikhade, P., Bajaj, P., Motwani, N., Mahapatra, J., 2020. Reattaching the fractured fragment in Ellis Class 3, without extraction/removal of that fragment. MEDICAL SCIENCE 24, 2445–2451.
13. Rathi, S.D., Nikhade, P., Chandak, Manoj, Motwani, N., Rathi, C., Chandak, Madhulika, 2020. Microleakage in Composite Resin Restoration- A Review Article. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 1006–1011. https://doi.org/10.14260/jemds/2020/216
14. Rathod, R., Thakre, P.P., Ade, V., 2020. Evaluation of efficacy of Navakarshik Kwath Ghan in Sheetpitta with special reference to Urticaria. INTERNATIONAL JOURNAL OF AYURVEDIC MEDICINE 11, 441–445.
15. Rathod, S., Wagh, D., Lamture, Y., 2020. Preoperative Serum Albumin and it's Outcome on Postoperative Mortality and Morbidity: A Review Article. JOURNAL OF RESEARCH IN MEDICAL AND DENTAL SCIENCE 8, 180–185.
16. Raut, Akshata, Risaldar, P., Nagvi, W.M., Wane, M., Sahu, A., 2020. Case report of a spastic diplegic cerebral palsy patient: Clinical decision making in physical therapy. MEDICAL SCIENCE 24, 1809–1813.
17. Raut, N.G., Mourya, A.T., 2020. Effectiveness of Simulation Teaching Regarding CPR among Secondary School Teachers. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 2730–2737. https://doi.org/10.14260/jemds/2020/593
18. Rawekar, A., Choudhari, S., Mishra, V., Vagha, S., 2020. Formative assessment in practical for Indian postgraduates in health professions education: A strategic initiative towards competency-based education. JOURNAL OF FAMILY MEDICINE AND PRIMARY CARE 9, 3399–3404. https://doi.org/10.4103/jfmpc.jfmpc_185_20
19. Reche, A.M., Nagpure, S.P., Sangwan, P.D., Jjodiya, C., Nimbulkar, G.C., Deolia, S.G., 2020. Relationship between nutritional status, socio-economic and dental caries status of rehabilitated children of age 4-14 years in Central India. MEDICAL SCIENCE 24, 575–581.
20. Reddy, S.M., Dhaniwala, N.S., 2020. Outcome of Surgically Managed Diaphyseal Fractures in Children- A Prospective Study. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 393–397. https://doi.org/10.14260/jemds/2020/90
21. Sahu, A., Naqvi, W.M., 2020. Quarantine Exercises in the Time of Covid-19- A Review. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 1922–1927. https://doi.org/10.14260/jemds/2020/418
22. Sahu, G., Verma, R., Acharya, S., Shukla, S., Pratapa, S.K., 2020. Coexistence of Miliary Tuberculosis with Tubercular Sacroiliitis in a Young Immunocompetent Female. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 1834–1837. https://doi.org/10.14260/jemds/2020/400
23. Sahu, P.J., Singh, A.L., Kulkarni, S., Madke, B., Saoji, V., Jawade, S., 2020. Study of oral tranexamic acid, topical tranexamic acid, and modified Kligman's regimen in treatment of melasma. JOURNAL OF COSMETIC DERMATOLOGY 19, 1456–1462. https://doi.org/10.1111/jocd.13430
24. Sahu, P.R., Hiwale, K.M., Vagha, S.J., 2020a. Transitional-Cell Carcinoma of the Endometrium: A Rare Case Report. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 2666–2668. https://doi.org/10.14260/jemds/2020/579