



Original article

Infantile hemangiomas in Bouaké: about 20 cases

Les hémangiomes infantiles à Bouaké : à propos de 20 cas

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Résumé

Introduction : Les hémangiomes infantiles (HI) sont des tumeurs vasculaires bénignes. Ils apparaissent quelques jours à semaines après la naissance et régressent spontanément en laissant parfois des séquelles fibro adipeuses. Ils sont fréquents en Europe mais peu documentés en Afrique particulièrement en Côte d'Ivoire. L'objectif de cette étude était la description des caractéristiques épidémiologiques cliniques et thérapeutiques des cas rencontrés au service de dermatologie-vénérologie du CHU de Bouaké.

Méthodologie : Il s'agissait d'une étude rétrospective descriptive effectuée au service de dermatologie-vénérologie du CHU de Bouaké sur une période de 42 mois, de janvier 2021 à juin 2024.

Résultats : Sur la période d'étude, nous avons recensé 20 cas d'HI sur un total de 5604 patients, soit une prévalence de 0,35%. L'âge moyen était de 2 ans avec des extrêmes de 2 mois et 9 ans. Le sexe ratio était de 0,43. Dans 20 % des cas, les enfants étaient nés

de grossesses à risque et 20 % des enfants avaient un poids de naissance anormal. Chez 95 % des enfants, les lésions étaient apparues dans les deux premières semaines de vie. Dans 50% des cas les lésions avaient une localisation céphalique et 50% des lésions pouvaient menacer le pronostic vital (hémangiomatose multifocale) et fonctionnel (péri oculaire, mammaire, nasal, en barbe). Dans 90% des cas, la lésion était unique et 30% des HIs étaient ulcérés. Le traitement a consisté en une abstention thérapeutique dans 60% des cas.

Conclusion : Les HI sont rares à Bouake. Malgré cette rareté apparente, ils méritent une attention particulière du fait de leurs prédominances céphaliques pouvant entraîner un préjudice esthétique ou fonctionnel.

Mots-clés : Hémangiomes infantiles, Bouaké, Préjudice.

Abstract

Introduction: Infantile hemangiomas (IM) are benign vascular tumors. They appear a few days to weeks

after birth and regress spontaneously, sometimes leaving fibro adipose sequelae. They are frequent in Europe but little documented in Africa, particularly in Côte d'Ivoire. The objective of this study was to describe the epidemiological, clinical and therapeutic characteristics of the cases encountered in the dermatology-venereology department of the Bouaké University Hospital.

Methodology: This was a descriptive retrospective study carried out at the dermatology-venereology department of the Bouaké University Hospital over a period of 42 months, from January 2021 to June 2024.

Results: Over the study period, we identified 20 cases of IH out of a total of 5604 patients, i.e. a prevalence of 0.35%. The mean age was 2 years with extremes of 2 months and 9 years. The sex ratio was 0.43. In 20% of cases, the children were born to high-risk pregnancies and 20% of the children had an abnormal birth weight. In 95% of the children, the lesions had appeared within the first two weeks of life. In 50% of the cases, the lesions had a cephalic location and 50% of the lesions could threaten the vital prognosis (multifocal hemangiomatosis) and functional prognosis (periocular, mammary, nasal, beard). In 90% of cases, the lesion was single and 30% of the IHs were ulcerated. Treatment consisted of therapeutic abstention in 60% of cases.

Conclusion: IHs are rare in Bouake. Despite this apparent rarity, they deserve special attention because of their cephalic predominance that can cause aesthetic or functional damage.

Keywords: Infantile hemangiomas, Bouaké, Prejudice.

Introduction

Infantile hemangiomas (IM) are benign vascular tumors, they appear a few days to weeks after birth

and regress spontaneously, sometimes leaving fibro adipose sequelae [1].

They are frequent in Europe [1] but little documented in sub-Saharan Africa, particularly in Côte d'Ivoire.

The objective of this study was to describe the epidemiological, clinical and therapeutic characteristics of the cases encountered in the dermatology-venereology department of the Bouaké University Hospital.

Methodology

We carried out a descriptive retrospective study over a period of 42 months, from January 2021 to June 2024, at the dermatology-venereology department of the Bouaké University Hospital.

The diagnosis of infantile hemangioma was made on the basis of clinical arguments and all children aged 0 to 15 years without distinction of sex in whom the diagnosis of IH was retained were included after parental consent.

With the help of a survey sheet, we collected the following data:

Epidemiological data (Prevalence of infantile hemangiomas, age and sex of patients).

Data on pregnancy and childbirth (mother's age at delivery, term of pregnancy, route of delivery, infections during pregnancy and gestational hypertension, birth weight, concept of inbreeding).

The clinical characteristics of infantile hemangiomas (time to onset of lesions, locations of lesions, number of lesions).

The processing carried out.

Data were analyzed using epi info 7.2.6.0 software

Results

Over the study period, we identified 20 cases of IH out of a total of 5604 patients, i.e. a prevalence of 0.35%.

The average age of consultation of children was 2 years with extremes of 2 months and 9 years and 80% of children had consulted in the first year of life. The sex ratio was 0.43, or 2.3 women for every 1 man. The mean birth weight was 3.475 kgs with extremes of 2.3 kgs and 5 kgs. In 15% of cases, the newborns were macrosomes and in 5% of cases, they were low birth weight. There were no premature babies in our study. The mean age of mothers at childbirth was 27.56 years with extremes of 15 years and 39 years. There were 20% of pregnancies that were at risk because of the mother's age. In 95% of cases, the children were born to non-consanguineous couples. There were 80% of pregnancies that had taken place without infection. At delivery, the mothers' age was between 20 and 35 years in 80% of cases. Vaginal delivery was carried out in 90% of cases and all children were born at term. The mean age of onset of lesions was 65.61 days (about 2 months) with extremes of 00 days (at birth) and 1094 days (about 3 years). The lesions appeared in the first two weeks of life in 95% of cases. The lesions were localized at the cervicocephalic level in 50% of cases and there was multifocal hemangiomatosis in 5% of cases. In 50% of cases, the lesions had a location that could cause functional or aesthetic damage. In 90% of cases there was a single lesion. The lesions were ulcerated in 30% of cases. Therapeutic abstention was the main therapeutic modality in 60% of cases.



Fig 1: Infantile hemangioma of the left lateral edge of the nose

Source: Dermatology Department of the Bouaké University Hospital



Fig 2: Superficial infantile hemangioma of the scalp

Source: Dermatology Department of the Bouaké University Hospital



Fig 3: Ulcerated infantile hemangioma in the right wrist

Source: Dermatology Department of the Bouaké University Hospital

Discussion

The retrospective nature of the study and the small sample size limit the scope of the conclusions and the generalization of the results, nevertheless this study allows us to describe the socio-demographic, clinical and therapeutic characteristics of childhood hemangiomas in Bouaké.

Infantile hemangiomas (IM) are benign vascular tumors, common in Europe [1] but poorly documented in sub-Saharan Africa [2] particularly in Côte d'Ivoire [3].

In our study, the prevalence was 0.35% of all

consultations. This prevalence is different from that found in Caucasian children, where it is thought to be higher. [4]

This low prevalence in our study could be explained by a lack of knowledge of the pathology by non-dermatologists or also by the fact that on black skin, red lesions can go unnoticed, especially when they are small, or also by the regular attendance of traditional therapists by patients in our context.

The average age at consultation was 2 years, which indicates negligence or lack of awareness of this condition by the population.

There was a clear female predominance with a sex ratio equal to 0.43. This female predominance has been found by most authors [3, 2, 4, 5]. This could be explained by the greater importance that parents place on the appearance of their female children.

According to some authors, several factors increase the risk of childhood hemangiomas (IM), including the mother's age, prematurity, low birth weight [1,6,7].

In our study, the mother's age was higher than the normal age (which is 35 years) in 20% of cases. In 15% of the cases, the children were macrosomes and 5% of the children had a low birth weight.

There was an infection during pregnancy in 20% of cases and we encountered a case of pregnancy hypertension.

These factors have been found in the literature except macrosomia.

We believe that macrosomia may also be associated with infantile hemangiomas (IM).

One of the hallmarks of infantile hemangiomas (IM) is the latency time between birth and the onset of lesions [6, 1, 2, 3]. In our study, 85% of the lesions appeared in the first two weeks of life, of which 5 (20%) were present at birth. These results are close to those of DICKO, which found 41.8% of the lesions that had appeared at birth [2]. Indeed, infantile hemangiomas can appear at birth in the form of red macules simulating a planar angioma [2, 8]. Doppler ultrasound and the search for GLUT 1 or progression to spontaneous regression make it possible to make

the diagnosis [1] .

In our study, 50% of the lesions were located in the head and neck. These results are similar to those in the literature [3, 2, 1, 9]. We have encountered only one case of multifocal hemangiomas without extracutaneous involvement. Indeed [5], multifocal hemangiomas is rare and has a significant risk of extracutaneous involvement, particularly hepatic damage [10].

In our series, 10 patients (50%) had a location of the lesions that could cause damage (aesthetic, functional, and vital) (angle of the eye, lower lip, beard, miliaria, root of the nose, breast, face). It is therefore important to pay particular attention to this pathology to prevent the possible aesthetic and/or functional sequelae that they could cause.

The majority of patients (90%) had a single lesion. Our results are similar to those of the literature [2, 5,] which found 94.11% and 61.10% respectively.

The main complication we found was ulceration in (30% of patients). Indeed, according to most authors, ulceration is the most common complication [11, 8, 12] and it is due to several factors such as the location, size, and type of hemangioma [1, 11]

The prevalence of ulcerations is high in our study (30%) because in addition to the causes revealed in the literature, our patients resorted to the application of poultices, irritating practices (massages with hot water or with warmed objects).

We opted for therapeutic abstention in 60% of cases and in 25% of cases we used timolol eye drops that we used as a topical for application to the lesions.

Since the discovery by Labreze of the beneficial effect of propranolol on infantile hemangiomas corroborated by a clinical trial [13], propranolol has been the treatment of choice for infantile hemangiomas that can cause aesthetic, functional or vital damage [14, 8].

Other beta-blockers such as timolol have been proposed as an alternative to propranolol in case of contraindications, adverse effects or in case of unavailability, especially if only the aesthetic or functional prognosis is at stake [15].

In our case, we used timolol eye drops because the paediatric form of propranolol was unavailable in our context and timolol eye drops was the only available dosage form of beta-blocker that could be applied topically.

Conclusion

Infantile hemangiomas are rare in Bouake. Despite this apparent rarity, they deserve special attention because of their cephalic predominance which can cause aesthetic or functional damage. Non-dermatologists, nurses and midwives as well as other health professionals in contact with children should therefore be trained in the early recognition of suspicious lesions. It will therefore be necessary to provide health centres with the necessary means to enable specialists to diagnose and treat complicated forms.

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Conflict of interest : None

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