

SFMCP dec. 2001

TOE AMPUTATION IN MACRODACTYLIES

**ABOUT 3 CASES OF NEUROFIBROMATOSIS
& MACRODYSTROPHIA LIPOMATOSIS**



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Isolated macrodactyly = Hamartoma

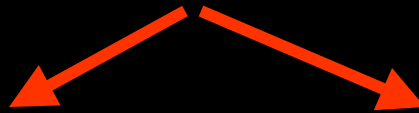
**Slow , progressive unilatéral overgrowth
of all mesenchymal elements**

2 types : static or progressive (Barsky)

**Dennyson W.G., Bear J.N. , Bhoola K.D. :
Macroductyly in the foot , JBJS 1977, N° 3 , 355-359**



**etiology : 2 hypothesis
in macroductyly**



Brook & Lehman 1924



Neurofibromatosis

Feriz theory 1925



**Progressive
Macrodystrophy
lipomatosa**



Case 1

Man – 36 years old

Difficulties to shoewearing – no pain
Stiffness of the 2nd MTP

Already operated 1 time on the second toe
and 1 time on dorsal face of the ankle
Histological finding : neurofibromatosis

No obvious Von Recklinghausen disease :
Only 1 café-au –lait spot.

Clinical aspects



- Skin lesion on the second toe and the lateral side of the first toe
- MTP2 tumefaction



X ray



2nd toe phalangeal hypertrophy

MRI aspect

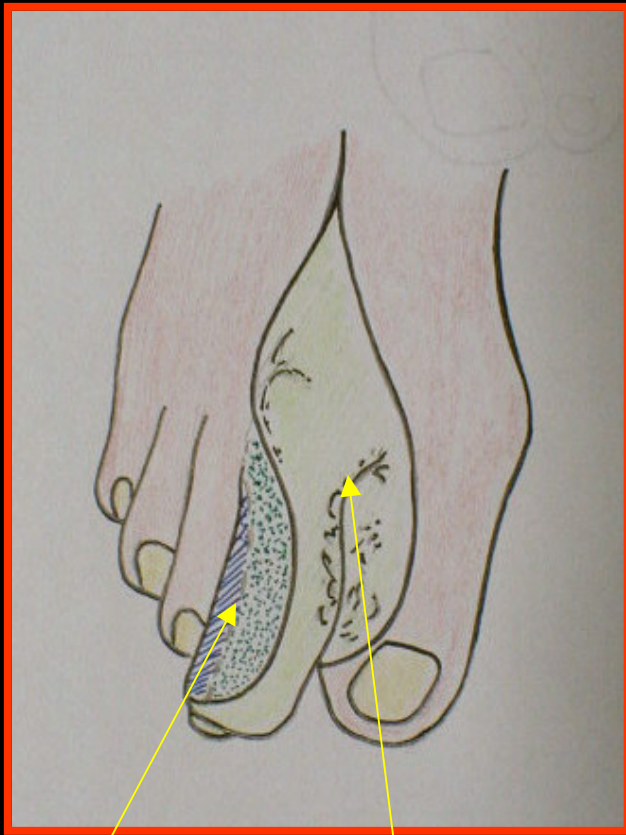


Fibromatosis on MTP2



Treatment : Double crossing flap

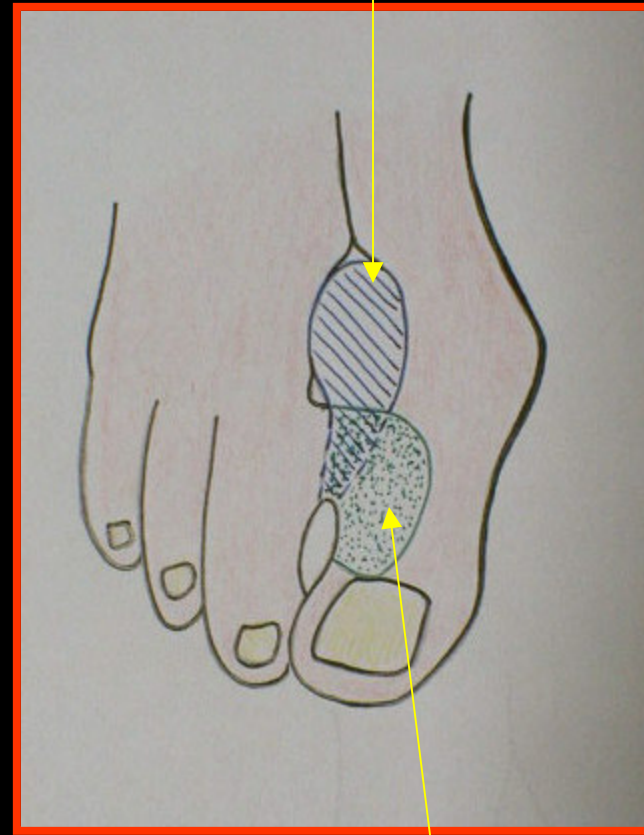
before



2nd toe flap
Divided in two parts

Resected area

after



Plantar part

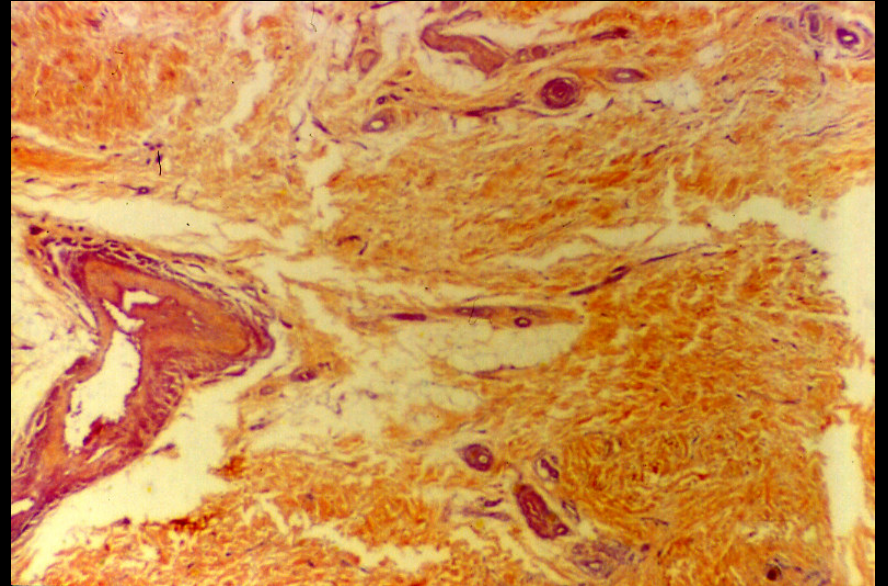
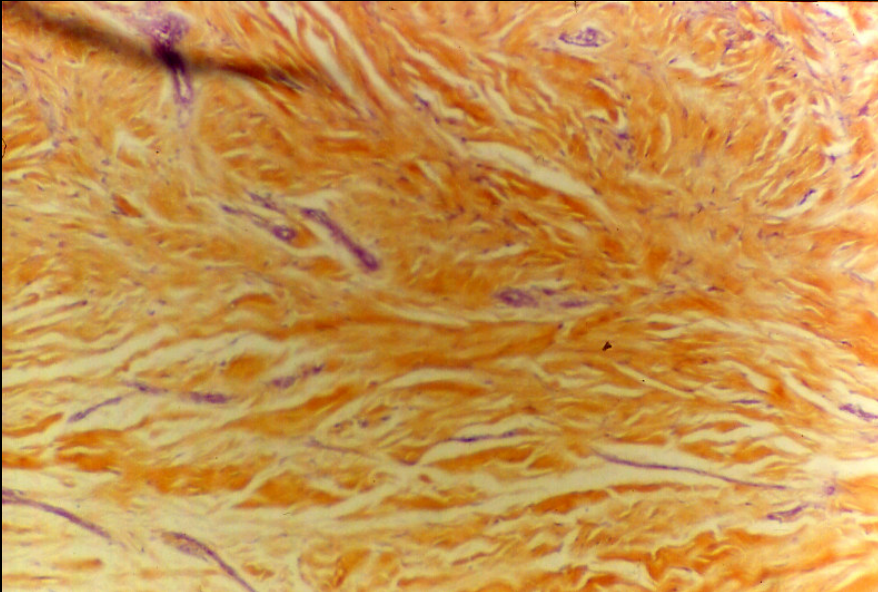
Dorsal part



2nd toe amputation with the lateral skin of the great toe

Skin reconstruction with a crossing flap from the lateral side of the second toe

Histological findings



neurofibromatosis

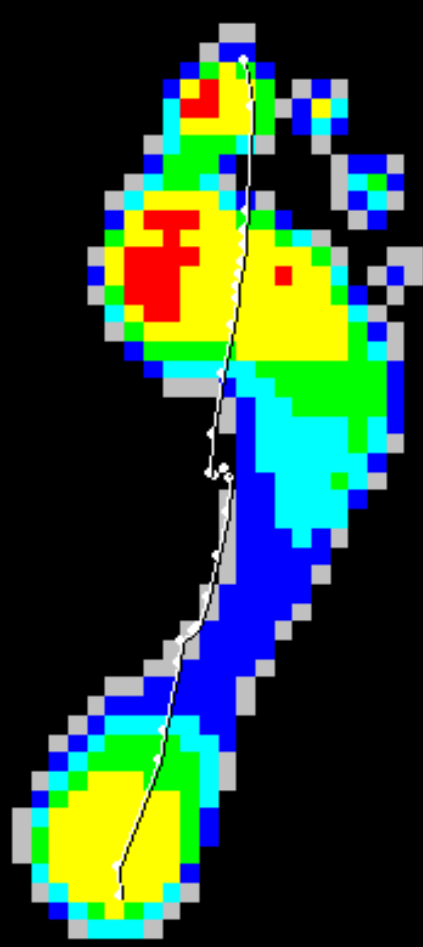
Results
6 months after

Clinical aspects





X ray



Emed dynamic print

Case 2

- **Man 31 years old**
- **2nd & 3rd toe macrodactyly**
- **Difficultie of shoewearing**
- **No pain**
- **No previous surgery**



Clinical aspects



- **No skin modification**
- **IP & MTP3 ankylosis**



Typical plantar mass

X ray aspect

IP fusion

Phalangeal hypertrophy
& dystrophy

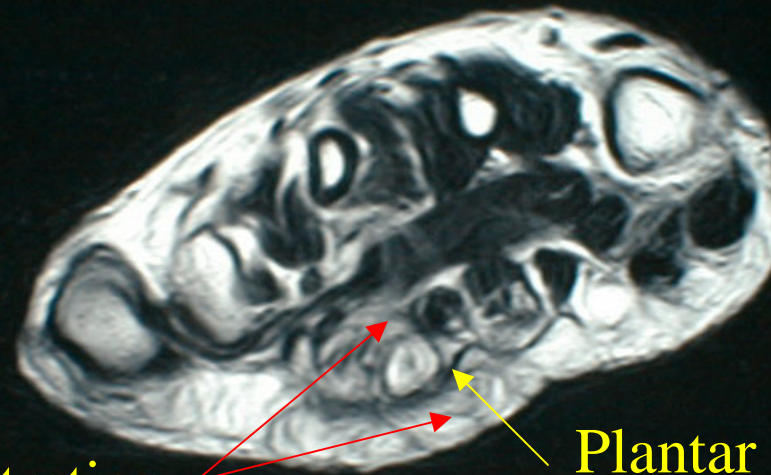
MTP3 dystrophy



MRI



Lipomatosa infiltration



Plantar aponevrosis



P1 + P2
Hypertrophy
& IP fusions



Case 3

Woman 30 years old

Macroductyly of the 2nd and 3th toes with stiffness and chronic infection of the second toe

Difficulties to shoewearing – no pain

3 times surgery on the 2 toes before





X ray aspect

**Phalangeal & metatarsal
head dystrophies**

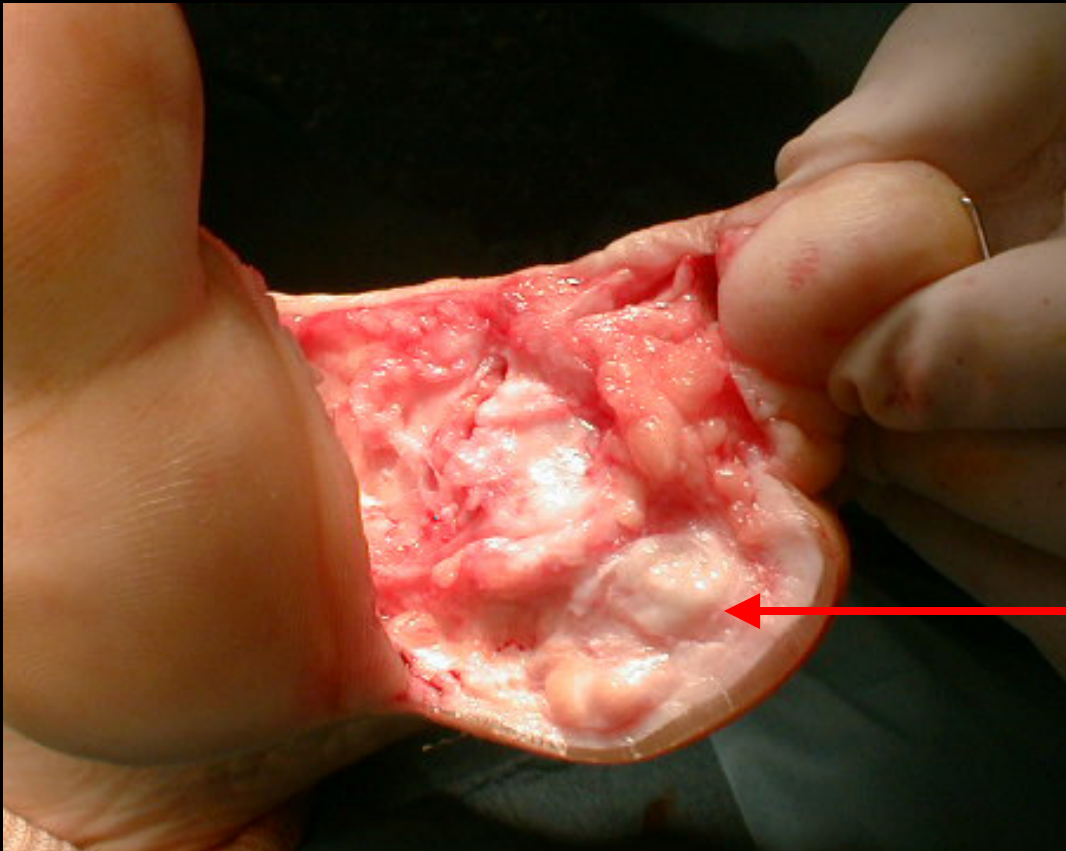
Interphalangeal fusion

Treatment

2nd toe amputation with partial resection
of the 2nd phalangeal **of the 3rd toe**

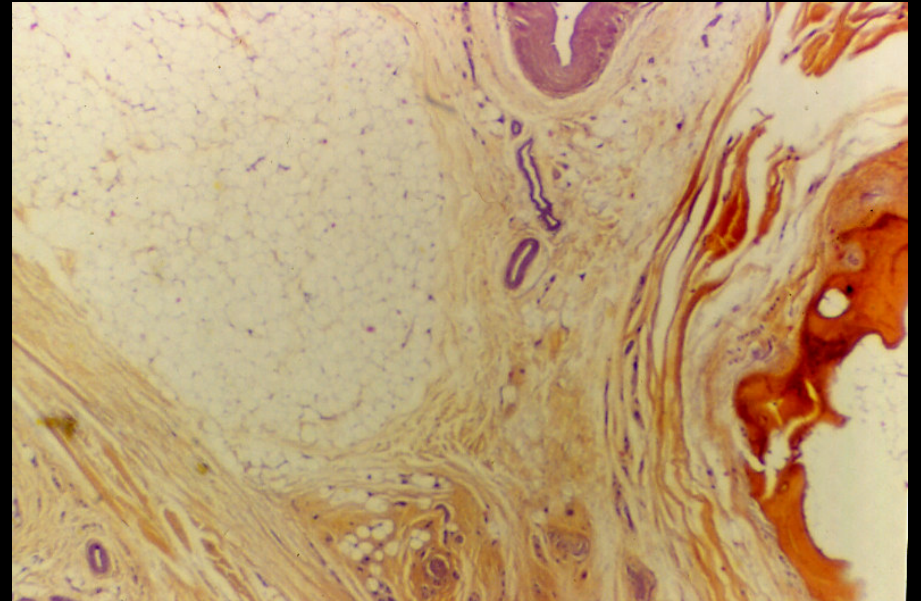
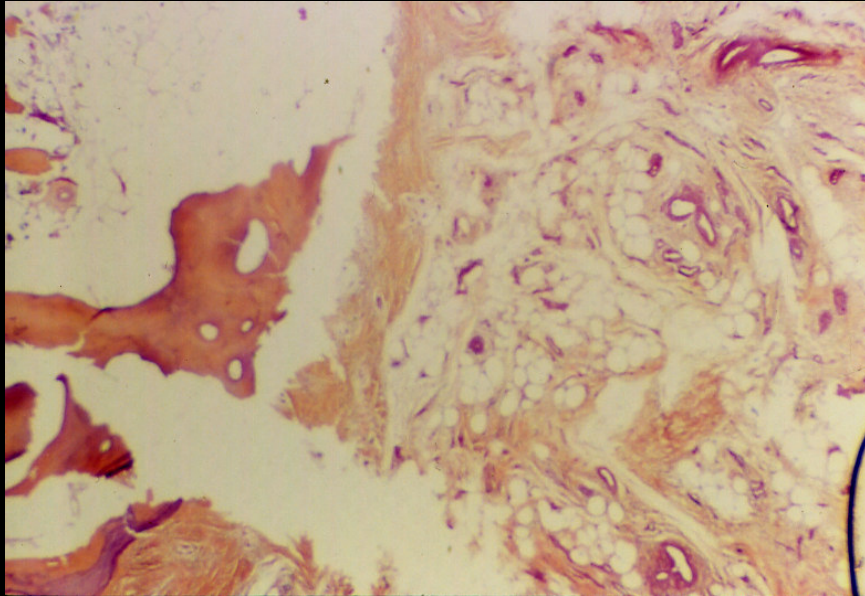


Intraoperative findings



**Fibrolipomatosa
tissu**

Histological findings



Macrodystrophia lipomatosis

DISCUSSION

Not 2 hypothesis

But 2 etiologies

DISCUSSION

Why to separate this both etiologies ?

Prognostic



fibromatosis :
2 to 5 % sarcomatous degeneration



lipodystrophy lipomatosa :
no degenerative change

DISCUSSION

Congenital but no hereditary transmission

DISCUSSION

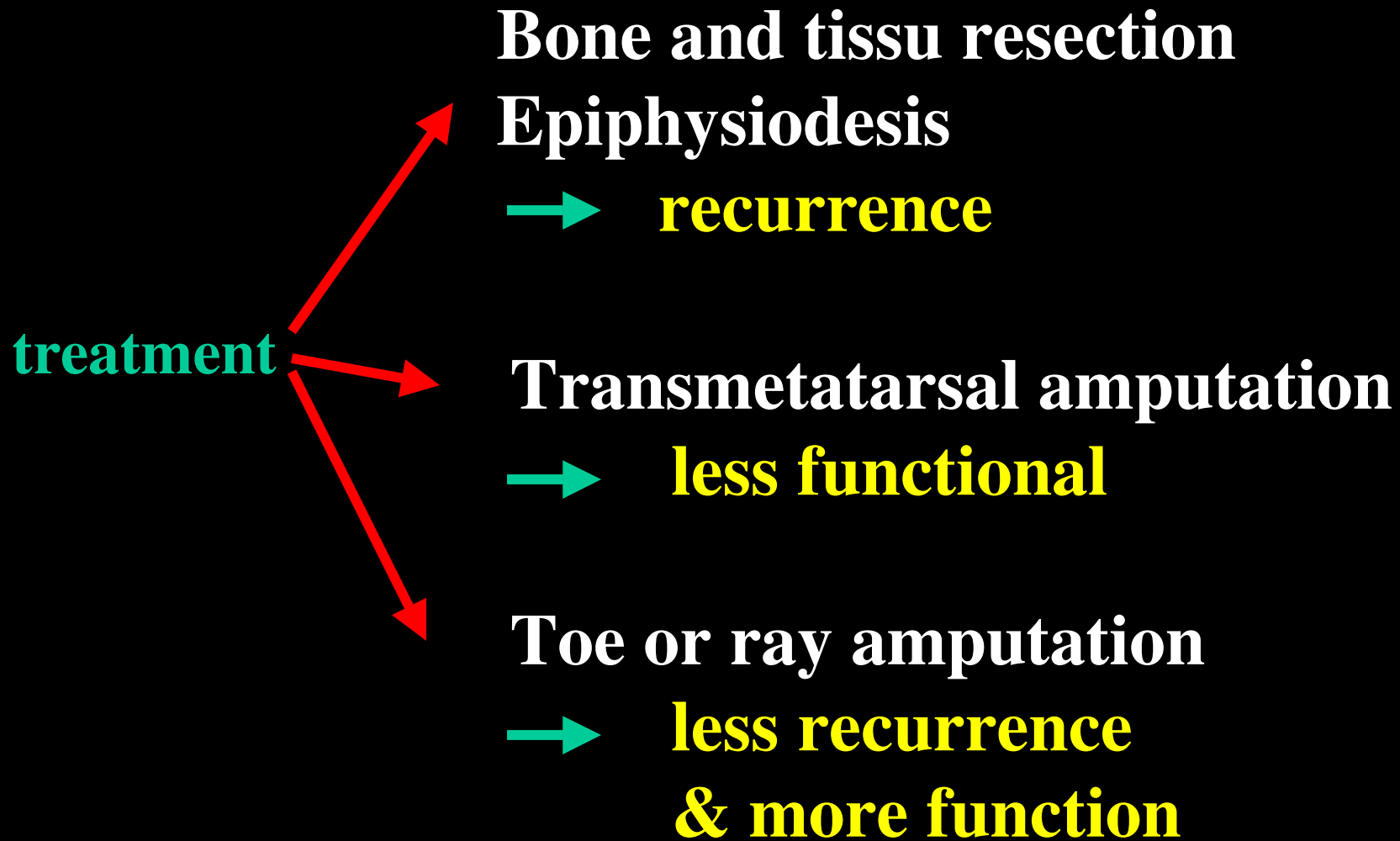
treatment

2 aims :

 **Keep a good foot function**

 **Avoid recurrence**

DISCUSSION



CONCLUSION

Isolated macrodactyly

→ 2 etiologies

- neurofibromatosis
- macrodystrophia lipomatosis

Treatment : ray amputation

→ functional & less recurrence



thank you

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