

Gymnastics for our feet.

Prophylaxis of плоскостопия for children.

The problems of flat-foot very relevant (of current importance) in our days. As any other illness of civilization, this illness is so much widespread among a population, children are especially subject to it. From some data, 70% children of going to school, already suffer flat-foot. Why do so many our children suffer flat-foot?

An answer for this question is covered in that modern surfaces which we walk on are hard and even. We walk on an asphalt, we walk at home on hard surfaces. We forgot practically, what to walk barefoot on a grass and on stone. As a result of it our foot receives less very valuable information which is in an us environment. It not adoption to the different terms of existence, muscles become languid, copulas are weakened and as a result of all of it there is a flat foot.

To someone it can show oneself that flat-foot not such and meaningful problem. Eventually, so many people suffer flat-foot, but not everybody complains, that for him flat-foot. However if to look at it from other side, it is possible to understand that flat-foot, it is a serious enough problem.

From flat-foot work of not only foot but also overhead joints of organism is violated in an organism. Knee, hip joints are strained, a carriage distorts. Head pains, pains, can appear in a spine. From last data, flat-foot even influences on such, seemed unconnected with him problems, as bite.

Features of anatomy and forming of flat foot.

And so, what плоскостопие? For that that to understand it, it is necessary to take apart as a foot is arranged. In a norm in a foot distinguish a few vaults are archs which help a foot to hold the form in space, when you tread on it. Distinguish:

- longitudinal vault which goes from a heel to the fingers (external and internal);
- transversal vault which goes across fingers.

If to look at a foot from one side (photo of foot from within) that, you will lead away foremost, as a longitudinal vault looks. Due to him a foot is raised above the floor. That to see a transversal vault, it is necessary to probe a foot on the special devices which are named pantoscop.

What flat-foot threatens to the child.

At development of flat-foot, a foot changes the configuration. That to rotin, as far as a foot is changed, it is possible to look at it from one side. At flat-foot, the height of vault will diminish, and a foot fully can lie down on support. There is a foot of applanate (explanate, flattened) at such variant. The most important, at applanate, a foot loses the depreciation function. It stops to execute the function of spring, every step will remind a blow.

For children, except for applanate of longitudinal vault, it is necessary to pay attention, as a heel is centred in relation to a shin. For that that to see it, will look at the feet of child behind (photo of feet of child behind). In a norm, the ax of shin which goes apeak must proceed the vertical ax of heel.

When a child has flat-foot, the ax of heel is displaced outside, this state is named a strephexopodia. For little children the degree of flat-foot is determined on that, how a heel is displaced outside and the diagnosis of such children sounds as a valgus or aflat - valgus foot.

Strephexopodia dangerously that loading falls not apeak, along a shin, and displaced. All of structures which are in a foot are thus displaced: copulas, bones change the position. So not normally functionings feet give the distorted information, that results in subsequent distortion of other systems of organism, joints and organs.

As possible to define flat-foot for the child.

What is it needed to pay attention on to the parents?

Foremost, will look at the feet of child behind. At aflat - valgus foot or valgus foot of heel of foot stand unevenly, they will be unfolded outside. If to look at the shoe of child, it is possible to see that it is unevenly ground off - an inside differs from external.

Second on what it is needed to pay attention, it as a child puts a foot on the floor. Fully puts a foot on support, or not.

Many advise, in order that to know whether a child has flat-foot or not, an ichnogram is done. At such method, a foot is painted, what or by solution, and put on a surface. On an imprint judge about that, as far as flattening foot. But it is independently better not to apply this method, because diagnostics of this method strongly depends on age of child and from that on how many for him other joints are changed.

Children to 4-years-old age on the moves have a physiology fatty pillow, and if to do the imprint of such foot, it is possible to see flattening which flat-foot

is not actually as though. Another reason on which by mistake diagnose is baker's legs (knock-knee) feet. A foot seems flat in this case, but if to plumb a leg strictly, an imprint will turn out normal. From 5-6 years parents independently can notice some errors for the child. Pigeon-toe, rejections feet outside or *вовнутрь* at walking or standing, can testify to flat-foot. For confirmation of the suspicion or for a complacency it is necessary to inspect the shoe of child - whether it does not wear out on the internal side of sole and heel. In more senior age a child will express the complaints on which it is possible to suspect flat-foot, - at walking feet are quickly tired, pain appears in gastrocnemius muscles, on a sole in area of vault of foot. Sometimes pain spreads from a sole through an ankle to the thigh.

However necessary it is to take into account a that circumstance, that the foot of child grows quickly, therefore a shoe needs to be often changed. For teenagers at heavy flat-foot, attended with sharp pains, treatment is begun with imposition of gipseous bandages. After disappearance of the pain feelings an orthopaedic shoe, massage, gymnastics, is appointed. And only if all of it did not result in anything, an operation is possible.

At brightly expressed flat-foot a teenager needs it will be to think of choice of profession, unconnected with the protracted walking or standing.

Not looking on seeming simplicity of diagnostics, at any doubts better will appeal to the doctor an orthopaedist. Because only a doctor can estimate all of symptoms, estimate the range of motion in joints and say, as far as this pathology is serious, and whether it needs it attend, or it is necessary simply to look after a child.

Is it possible to warn and halt development of flat-foot?

It is necessary as possible before to diagnose *плоскостопия*. If for a child found, what or changes in a foot, in early age it is much simpler to influence on further fate. For children all of medical measures are of the large use, what for adults and possibility of correction wide enough. Therefore, as soon as you knew that for your child flat-foot, it is necessary will appeal to the specialist, that he picked up the complex of manipulation treatments.

As soon as diagnosed a child flat-foot or aflat - valgus foot, it is necessary at once to proceed to treatment. Basic points of treatment, it:

- orthopaedic insoles;
- medical physical education;
- and other physical therapy methods of influence.

Sense of setting of orthopaedic insoles is taken to that they can support the vault of foot effectively. Except for it, a good orthopaedic insole can support correct position of heel. Mode of carrying of orthopaedic insoles, their

configuration, a doctor determines. Because on it strongly depends, as far as a foot will be corrected.

Medical physical education for a correction and prophylaxis of flat-foot.

By basic treatment of flat-foot of foot, there is medical physical education. Medical physical education is a complex of specially neat exercises for that, that to compel to work muscles of foot more effectively. Foundation of task taken not only to training of muscles but also to the correct raising of foot. In addition, during training habit is produced not only it is correct to put a foot but also rightness of perception of feelings of this motion. Different massage wares are used for this purpose, for example: carpets, balls, special massage apparatus.

Employment is always begun with a limbering-up. Exercises which allow to fix a foot in reverse to deformation position are further executed:

- walking;
- walking on a stick;
- rolling of rollers a foot;
- capture of pencils (objects) by fingers feet;
- walking on a squeak;
- walking on a massage carpet.

The complex of medical physical education is counted on what to train muscles feet which move it inward. In addition, the correct raising of foot is fastened. In daily exercises, a foot fills in the deficit of support. Part of exercises of this complex, it is necessary to execute, that foot, felt different objects. For example, in the complement of complex enter exercise for development of muscles of shallow motility (motor activity) of foot, it exercise on grabbing of shallow objects and walking on a stick.

The best method of strengthening of feet is walking. During walking the exchange of matters is improved, muscle activity activates, blood supply is improved. However much the protracted walking results in the overstrain of muscles, stagnation and accumulation of suckling acid, that causes sharp pains.

For maintenance of feet in good condition it is not enough to contain them in a cleanness. It is necessary to execute exercises for capillaries, for clearing of cages and for a satiation their energy. It is necessary to watch, that feet were always warm, rose color.

The soles of feet are surprisingly sensible, thus, they provide our organism perfect co-ordination of motion, that allows us to feel an environment. Therefore

part of exercises of complex serves in an order to give a foot the different feelings about contiguity with different massage wares: by carpets, rollers, marbles. It allows a foot to feel those motions which it does not feel at carrying an ordinary shoe. Part of exercises, which are executed with массажер allow a foot to feel the touch of different surfaces.

Complex of exercises for a correction and prophylaxis of flat-foot for children, directed on training of muscles, correct raising and development of shallow motility (motor activity) of foot:

1. Exercises on breathing.

Initial position is a basic bar.

«1-2» - to heave up hands upwards, to walk up socks, inhalation;

«3-4» - to drop hands, will go down on feet, exhalation.

Repetition 4 – time. (1.1 – 1.3 (5))

2. Exercise is a turn feet inward.

Initial position is a basic bar.

«1-2» - to turn feet inward, support on the external vault of foot (heels are displaced inward);

«3-4» - initial position is a basic bar.

«5-6» - to turn feet outside, support on the internal vault of foot (heels are displaced outside);

«7-8» - initial position is a basic bar.

Repetition 8 – 12 times. (2.1. – 2.5 (10))

3. Exercise is walking on socks.

To try to hold heels higher, and to stretch up.

To execute during one minute. (3.1. – 3.3 (13))

4. Exercise is walking of the «pigeon-toed bear».

Feet outside, support on the external vault of foot, tiptoes look inward.

To execute during one minute. (4.1. – 4.4 (17))

5. Exercise is jumps with landing on socks.

Repetition 15-20 times. (5.1 – 5.3 (20))

6. Exercise is squat.

Initial position is a basic bar with support on the external vault of foot, tiptoes look inward.

«1-2» is small squat of hand forward;

«3-4» is initial position;

Repetition 10 15 times.(6.1 – 6.3 (23))

7. Exercise – overcoming a shin a foot.

Initial position – to lay the foot of right foot on the shin of left (fingers engulf a shin).

«1-6» - to slide a foot on a shin upwards – downward;

«7-8» – to lay the foot of the left leg on the shin of right;

«1-6» - to slide a foot on a shin upwards – downward;

«7-8» - to lay the foot of right foot on the shin of left.

To repeat 6 – 8 times.(7.1 – 7.8 (31))

8. Exercise with a stick (by a hoop).

Initial position is a basic bar, feet athwart to the stick.

«1-8» is walking, by small steps, to the right on a stick;

«1-8» is walking, by small steps, to the left on a stick;

A foot fully owes операться on a stick, desirably a floor is touched by a heel, and toe.

Executed during one minute.(8.1 – 8.14 (45)

9. Exercise is walking along a stick by short «flight» of stair.

Initial position is a basic bar, vault feet on a stick, socks in разнае sides.

«1-7» is walking, by small steps, forward on a stick;

«8» is a turn;

«1-8» is walking, by small steps, forward on a stick;

«8» is a turn;

A foot fully owes операться on a stick, desirably a floor is touched by a heel, and toe.

Executed during one minute.

Any flat and round objects, no more than 3 – 4 centimetres, can replace a stick. (9.1 – 9.6 (51)

10. Exercises – sitting.

Initial position – sitting on a chair.

«1-2» - to bend tiptoes;

«3-4» is initial position;

To repeat 6 – 8 times. (10.1 – 10.3 (54)

11. Exercises – sitting.

Initial position – sitting on a chair.

«1» - by захатить hands right foot for a knee and to raise;

«2-3» are circular motions by a foot inward;

«4» is initial position;

«5» - by захватить hands the left leg for a knee and to raise;

«6-7» are circular motions by a foot inward;

«8» is initial position;

To repeat 6 – 8 times. (11.1 – 11.17 (71))

12. Exercises - sitting, with a massage ball.

Initial position – sitting on a chair, ball between feet.

«1-2» - roll a ball forward;

«3-4» -катим ball back;

To repeat 6 – 8 times. (12.1 – 12.4 (75))

13. Exercises - sitting, with a massage ball.

Initial position – sitting on a chair, right foot on a ball.

«1-7» - take for a ride a ball on a circle;

«8» is the left leg on a ball;

«1-7» - take for a ride a ball on a circle;

«8» is a right foot on a ball.

A foot actively presses on a ball.

To repeat 4 – 6 times, by the foot of every leg. (13.1 – 13.15 (90))

14. Exercises - sitting, with a massage ball.

Initial position – sitting on a chair, ball between feet.

«1» - to take a ball feet;

«2» - to raise a ball feet;

«3» - to drop a ball;

«4» is initial position.

To repeat 6 – 8 times.(14.1 – 14.4 (94))

15. Exercises - sitting, with massage balls.

Initial position – sitting on a chair, balls under the feet of feet.

«1» - to take a ball the foot of right foot;

«2-3» - to raise a ball;

«4» - to drop balls, initial position;

«1» - to take a ball the foot of the left leg;

«2-3» - to raise a ball;

«4» - to drop balls, initial position;

«1» - to take balls the feet of feet;

«2-3» - to raise balls the feet of feet;

«4» - to drop balls, initial position.

To repeat 6 – 8 times.(15.1 – 15.9 (103))

16. Exercises - sitting, with pencils.

Initial position – sitting on a chair, right foot on a pencil.

«1-2» - to take the fingers of foot pencil;

«3-4» - to raise;

«5-6» - to retain;

«7-8» - to drop.

To repeat from the left leg (feet naked).

Pencils can be a few.(16.1 – 16.18 (121))

That it was interestingly to the child, objects can be разные:

17. Balls; (17.1 – 17.27 (148))
18. Handkerchiefs; (18.1 – 18.8 (156))
19. Toys; (19.1 – 19.9 (165))
20. Towel; (20.1 – 20.2(167))
21. Fabric; (21.1 – 21.9 (176))

Beginning is necessary with more thick, gradually passing to to more thin.

22. Exercises - sitting, with a towel.

Initial position – sitting on a chair, a towel is spread under feet.

«1-8» - to take the fingers of right foot and to collect a towel;

«1-8» - to take the fingers of the left foot and to collect a towel;

«1-8» - to take fingers feet and to collect a towel;

To repeat 3 – 4 times. (22.1 – 21.22 (198))

23. Exercises are walking on a massage carpet.

To walk on a massage carpet in any direction.

Executed during one minute.

This exercise can be executed out of complex.

24. Exercises are walking barefoot on sand (for sand it is possible to adjust a box the size of 100 ÷ 50 see) or carpet from foam rubber (or with a large nap), bending fingers and leaning against the outward edge of foot.

Exercises of complex are executed barefoot. Efficiency of complex depends on frequency of implementation of exercises - for achievement of result it is needed заниматься every day.

Successes to YOU!