



Contents

Introduction

Page 2

Important techniques and information for all tying methods

Page 4

Tummy-to-tummy carries



Snuggle-hold carry

Page 6



Double cross carry

Page 8



Wrap cross carry

Page 10

Hip carries



Snuggle-hold carry on the hip Page 12



Hip carry
Page 14

Back carries



Wrap cross rucksack carry Page 15



Rucksack carry

Page 18

Bibliography:

- Prof. Dr. med. J. Büschelberger, specialist in orthopaedics, postdoctoral thesis, Dresden (1961): "Investigations into the characteristics of the hip in babies and its implications for the pathogenesis, prophylaxis and therapy of congenital hip dysplasia."
- Bernhard Hassenstein, Evelin Kirkilionis: Der menschliche Säugling, Nesthocker oder Tragling? (Human babies: altricial or "clinging young"?) In: Wissenschaft und Fortschritt 42/1992
- Evelin Kirkilionis: "Ein Baby will getragen sein" (A baby wants to be carried), Kösel-Verlag GmbH & Co., Munich, 1999
- Renate Köhler: Die Kunst des Bindens Das Buch zum Tragetuch (The art of tying the book to go with your sling), Verlag Renate Köhler, Münster, 1995

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Closely connected, safe and sound ... with your Storchenwiege® sling

We are pleased to see you have chosen a Storchenwiege[®] sling and hope you and your child will have a lovely time using it together. These instructions are designed to give you some valuable information about carrying babies and toddlers before going on to explain each carrying method step by step. With a little practice it will not be long before you are expertly tying your Storchenwiege[®] sling, and soon it might even become your constant companion.

But first let us take a look back through history. Human babies have always been nursed and carried, even in our modern industrial countries, so you are not spoiling your baby by carrying her. You are making your child strong. When you respond to her needs, this confirms and builds up your child's natural trust in you and boosts her self-esteem.

In behavioural biology, babies fall into the class of "parent clinger". The other two types of young are altricial young and precocial young. Altricial young are born with their eyes closed and unable to hear; they cannot move around and are only just able to regulate their body temperature. They need the protection of the nest and can be left there by their mother. They can go for long periods between feeds, and while the mother is away they remain still. Precocial young, on the other hand, are a smaller version of their parents; they can follow their mother around shortly after birth and need her around at all times. Human babies fit into neither group. Until the class of "clinging young" was introduced in 1970 by the biologist Prof. Bernhard Hassenstein, humans were considered altricial young and were treated accordingly. Clinging young, such as the offspring of apes, koalas etc. can cling onto their mother's fur with their hands and feet. Human babies cannot do this; they need to be held and supported. Leaving babies alone is the same as abandoning them. They perceive being left alone as a life-threatening situation and suffer from extreme fear – it is no wonder that babies start to cry when left alone in a room. Our clinging young are a sign of our adaptation to a nomadic lifestyle. Human beings stopped roaming just over 10,000 years ago, but this time is too short for biological or genetic adaptation to our new living conditions (cf. Evelin Kirkilionis: "Ein Baby will getragen sein" (A baby wants to be carried), published by Kösel-Verlag GmbH & Co., Munich in 1999 and Bernhard Hassenstein, Evelin Kirkilionis: "Der menschliche Säugling, Nesthocker oder Tragling?" (Human babies: altricial or "clinging young"?), in: Wissenschaft und Fortschritt 42/1992). Yet our anatomy shows that human babies are adapted to being carried. The "spread squatting position" is the ideal posture for the young hip, which is still cartilaginous, to mature (cf. Prof. Dr. med. J. Büschelberger: post-doctoral thesis, 1961). The development of the spine is also worth closer examination. Babies are born with a rounded back, which is what causes them to take up the "spread squatting position". The spinal column develops over three stages during a period of one year, stretching out from top to bottom. Well-developed muscles are required to support the spine and keep it in shape. During the first few weeks of life, the cervical

spine undergoes initial straightening, moving forwards and upwards. Lying on her tummy, the child can lift her head, move it independently, hold it up and turn it. Later she can also do this lying on her back. The straightening of these seven cervical vertebrae is known in the medical world as "cervical lordosis". The baby now strengthens the flexor and extensor muscles in her body (the flexor muscles are in the chest and stomach area, the extensor muscles are at the back of the body). Gradually, the whole central section of the spine with its twelve thoracic vertebrae can now straighten. In orthopaedics this stretching is known as thoracic kyphosis. This second, backward curve of the spinal column is complete once the baby can sit independently, on her own. Children do not crawl until their spinal cartilage is strong and well-conditioned, and their muscles are powerful enough. The muscles and spinal column are exercised together. Now, the child pulls herself up into a standing position and tries out her first steps. This takes strength and needs the five lumbar vertebrae to support her and bear her weight. Gradually, the spinal column fully acquires its "S" shape and the last phase is complete (lumbar lordosis) (cf. Renate Köhler: "Die Kunst das Bindens" (The art of tying), Renate Köhler publishing house, Münster 1995.) Some of the principles of healthy baby carrying are derived from this process:

- 1. The sling must be somewhat elastic to support your baby firmly and safely at the same time as allowing her back to take on a rounded shape. It becomes particularly round when a child falls asleep and her muscles relax. However, your child must not be allowed to slump down; she should be in a rounded, supported squatting position in the sling. Your Storchenwiege® sling has a diagonal elastic weave, providing sufficient elasticity while at the same time giving your baby just the support she needs.
- 2. The fabric needs to be tied so as to ensure baby's legs are in a "spread squatting position". When your child is tied in properly and firmly, the sling should absorb the movements and jolts from the wearer walking along, and transfer them away from the child's spine, back onto the wearer (a shock absorber effect). This protects the child's delicate vertebrae and vertebral discs. At the same time, however, the tying method should also support the wearer's posture.

The tying methods described below will help you carry your child easily and smoothy. If you follow the instructions correctly and carefully this will also help your pelvic floor, which is subjected to huge stress during pregnancy and birth.

IMPORTANT

Always carry your baby facing you and never facing forwards. Otherwise, her back will be pushed into a hollow shape, the "spread squatting position" is no longer possible, and, not least, the child is constantly exposed to environmental irritants.

This sling is not suitable for use during sports activities.

What other advantages are there to baby-wearing?

- The sling makes it easier for baby to get used to life outside the womb. She is in a familiar environment; her mother's or father's heartbeat, warmth and movement make her feel happy and safe. The familiar womb-like feeling helps the baby grow gradually into her new life. In the sling she can exercise her muscles and spine, her sense of balance is stimulated and improved, her metabolism and whole body are supported and boosted, and movements have a positive effect on her digestive system (even a healing effect, e.g. in the case of colic).
- Baby's natural sense of trust is strengthened and she gains self-esteem: she
 never feels left alone, is never left to cry in desperation, and feels safe and
 sound in the knowledge that she can rely unconditionally on her mother and
 father. From this safe place, she can take in and learn to understand her environment.
- It is easier to juggle everyday family life when you can simply take your happy baby everywhere with you.
- Being physically close helps you get to know your child much faster and better, and you learn to look after her more confidently.
- By carrying their child in a sling, fathers, too, have the chance to build up a strong, firm relationship with their child, to form an emotional bond with their baby or simply to catch up on some of the bodily contact which mothers get so much of during pregnancy.
- You have your hands free for baby's brothers and sisters. Young brothers and sisters love being wrapped up in the sling again too, and older siblings can develop a very special relationship to baby if they can carry their little brother or sister in the sling.
- Stairs, buses and hiking paths are no longer an obstacle.

More tips:

- We recommend practising in front of a mirror at the start until you become skilled at tying the Storchenwiege[®] sling. If you have someone else to help you, you will become confident in using your Storchenwiege[®] sling even faster.
- Always be sure to tie the Storchenwiege sling firmly. The material's diagonally elastic weave means baby's spine can easily take on a nicely rounded shape. Her body weight is evenly distributed on the wearer's body so there is no need to adjust your posture. Tying the sling firmly stops you adopting an awkward posture. When baby is tied in, her bottom should be at your waist level; this is the ideal height from the point of view of the wearer's centre of gravity.
- The child should always be wrapped so that the top edge of the sling extends above her ears by two finger widths. This way, even if her arms are later taken out of the sling, or it is pulled down to her neck, it can always be pulled up again to support her head when she falls asleep. If the sling extends above your child's head you will not be able to tie it firmly enough.

- Always remember the anatomically correct "spread squatting position" of the legs, which is also created by the roundness of the spine and is vital for the hips to develop healthily.
- If your baby has dysplasia or other problems with her hips, make sure to discuss the use of the sling with your pediatric orthopedic or family doctor.
- Some babies cry when they first use the sling; this is perfectly normal. Your baby can feel how uncertain you are as you tie the sling, and, of course, she also has to get used to the sling and this new feeling herself. The more you practise, the faster your uncertainty will disappear, and the sooner your baby will stop crying.
- As you tie baby in, talk to her, telling her what you are doing and why.
- If baby cries, do not take her out of the sling straight away: keep on tying it, then walk around with your child for a while. You will be amazed how quickly your baby calms down. Your heartbeat, breathing, smell, closeness, voice and the rhythm of your steps make baby feel safe and secure.
- When the weather is cold, always carry your baby under your jacket. No warm clothing can replace your body heat.
- Do not dress up your baby too warmly under the jacket: an appropriate hat for the weather, a scarf around her neck and warm socks are usually enough. On very cold days an extra jumper or cardigan will be fine.
- If you wear your child outside your jacket, she will need to wear a snow suit in cold weather. (Shiny, specially coated or layered suits are not suitable, as the sling will constantly slip).
- In summer, please also remember sun protection. We recommend putting long thin cotton socks and a sun hat on your child so that she is well-protected from the sun.
- Carry your baby for as long as you both enjoy it. This might just be for short periods at first, but even longer times can do no harm as long as you tie the sling carefully.
- You can carry your child in the sling up to around age three, or longer if required. When you are travelling, the sling is a useful, space-saving accessory.
- Before you first use the sling, wash it (without fabric softener), dry it then put it
 on your favourite armchair where you can "wear it in" by sitting on it. This
 makes it especially easy to tie.
- These tying instructions have been designed to be as simple to understand and as detailed as possible. If you need any personal advice on wearing the sling, we will be happy to find a local consultant to help you.
- Before you wear the sling the first time, read through the instructions carefully and familiarise yourself with each step.
- In these instructions we refer to babies as "she" for the sake of simplicity; this should be understood as including both baby boys and girls.

The **centre of the sling** plays the central role in many tying methods. That is why the centre of every Storchenwiege® sling is marked with a stork.



Every Storchenwiege® sling has different-coloured edges to help you tie it right. To keep things simple these edges are described in the instructions as the "head edge" and the "nappy edge".

Head edge: the edge of the cloth which goes behind the child's head or neck.

Nappy edge: the edge of the

cloth that goes behind the

child's bottom.

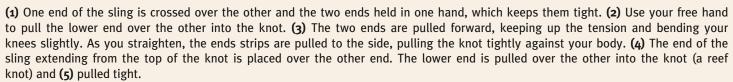
The final step in every tying method is a double knot. The double knot is tied as follows:













With any tying method it is important to **pull tight** each fold of the sling **one by one.**

If the end of the sling comes

your palm facing downwards.

over your shoulder, grasp it with



Grasp the sling below your chest when pulling it tight. Your body is moving and your shoulders are taking on the work; this helps the sling slide across your clothing more easily.



Grasp the sling from above in front of the hand holding the first end, taking a fold at a time and pulling each one tight.



To keep the sling tight, transfer each tightly-pulled fold between the thumb and forefinger of the hand holding the first end (as when playing the guitar).



The sling is draped over your arm away from your body like a waiter's napkin. Your body is moving and your shoulders are taking on the work; this helps the sling slide across your clothing more easily.



Grasp the sling from below in front of the hand holding the first end, taking a fold at a time and pulling each one tight.



To keep the sling tight, transfer each tightly-pulled fold between the thumb and forefinger of the hand holding the first strip (as when playing the guitar).

If the end of the sling comes from below, grasp it with your palm facing upwards.

Snugglehold carry

tummy-totummy "frog"

(suitable for babies from day 1 on; also appropriate for preemies)



1. Sit down and place the ends of the sling over your shoulders. The centre of the sling forms a loop in front of you. Place your baby in front of your tummy.



2. Now pull the sling up smoothly over your child's back until it is about two finger widths above her ears, with one hand holding baby's bottom.





3

3. Now reach inside under the end of fabric over your shoulder and grasp the head edge.



4. Now pull the head edge outwards, over your shoulder. The nappy edge is now above the head edge. The sling should be spread sideways about 15 cm across your shoulder. Do the same on the other side.



5. Now reach behind you with one hand, grasp one end of the sling and pull it forwards underneath the other, keeping that hand close to your body. Your other hand supports your child.



6. Drape the sling over your lower arm and pull the head edge tight.



7. Now use the hand which did the grasping a moment ago to hold your child and the head edge tight. With your free hand, reach behind you and pull the second strip forwards, crossing it over and again pulling the head edge tight. Now the two ends of the sling are pulled tight strand by strand, starting with the end you pulled forward first.





8. Next, knot the sling under your child's bottom, the ends going over her legs.



8a. When the sling is tied on, move your child's legs into the "spread squatting position". Both her legs should be at the same height, with her knees about level with her belly button.



8b. To give you more freedom to move, **fold** the sling upwards onto your shoulder, keeping the sling firmly tied around your child to give her firm support.

Two other methods of placing the child in the sling



1. With the centre of the sling forming a loop in front of your stomach, lower your child into the pouch from your shoulder. Now, pull up the head edge of the sling smoothly until it is two fingerbreadths above your child's ears. The remaining fabric is smoothed down under her bottom and folded up between her nappy and your tummy. Now continue from Step 3 above.





2. Lift one leg and wrap your child in the centre of the sling, draping it over your shoulders. Use one hand to support your child. Now continue from Step 2 above.

Double cross carry

(as soon as the child can hold her head up stabily)



1. Wrap the sling around your torso. The centre of the sling is in the middle of your back. The ends of the sling are draped over your lower arms.



2. Now pull both strips of the sling tight, fold by fold.



3. Cross the ends in front of your stomach. The end coming from behind you on your left is closest to your body and is draped over your right shoulder. The end coming from behind you on your right is draped over your left shoulder.



4. Now cross the ends behind you, pulling the end from your right shoulder forwards first, over your hip. Pull the end from your left shoulder forwards over your right hip. The ends of the sling are tied in a loose knot.



5. You have created a cross with your wrap in which you can place your child.



6. Place your child on your left shoulder, reach your right hand through under the right-hand side of the sling, and slip your child's left leg through under that strip of fabric.



7. Now place your child on your right 7.a The child is now snuggled on the shoulder, reach your left hand through under the left side, and slip your child's right leg through under that strip of fabric.



crossed sling tummy-to-tummy, still supported by your hand.



8. Now spread out the lower side of the sling across your child's back. Grasp the head edge of the lower side with your left hand and pull it tightly across your child's back so that the sling stretches from the back of one knee to the other.



9. Do the same with the upper side.









10. To pull the sling tight thoroughly, the loose knot is undone and both sides tightened fold by fold, starting with the left side. Next, tie a double knot. The ends of the sling run beneath your child's legs.

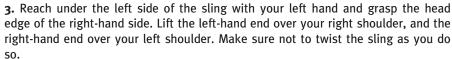


1. Place the centre of the sling in front of your chest.



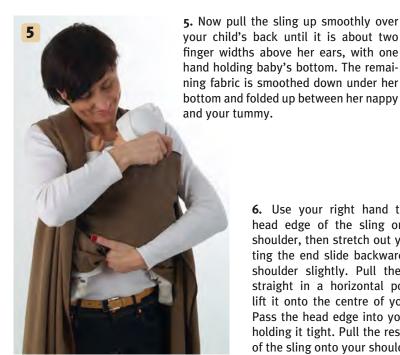
2. Now guide the head edge of the sling round behind you, holding the two sides tight with one hand.







4. Laying your child gently on your shoulder, let her slide into the pouch, reaching up to support her under the pouch.



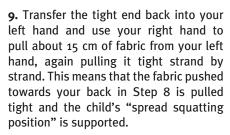
6. Use your right hand to grasp the head edge of the sling on your right shoulder, then stretch out your arm, letting the end slide backward down your shoulder slightly. Pull the head edge straight in a horizontal position, then lift it onto the centre of your shoulder. Pass the head edge into your left hand, holding it tight. Pull the rest of that end of the sling onto your shoulder.







8. Transfer the tight end into your right hand, reach into the roll of fabric at your child's knee and push the loose fabric toward your back.







10. Adjust the second end as described in Steps 6 to 9.



11. The two ends are now pulled firmly downwards past either side of your child, allowing her back to assume a rounded shape.





12. Cross the two ends below your child's bottom and guide them under her legs and behind you, where you tie a double knot.

Snugglehold carry

"frog" on the hip

(suitable for babies from day 1)



1. Take the centre of the sling in your left hand, then use your right hand to grasp the cloth about 50 cm further along and drape it over your shoulder.



2. Wrap the end in your left hand around your waist, beneath the end hanging down on your right, then drape it over your right shoulder above the first end.



3. Spread out the pouch of cloth now in front of your tummy, place baby on your left shoulder and slide her down into the pouch, onto your hip. Her feet should be outside the pouch.



4. Pull the sling smoothly over your child's back so that it reaches up two finger widths above her ears; smooth down the fabric towards her bottom, tucking any remaining fabric in between her nappy and your hip. Now take the upper end from your right shoulder.



5. Pull the head edge of that side round tightly and transfer it to the hand supporting your child's bottom.



6. Now use your right hand to grasp the head edge of the end on your shoulder and pull it through under that side outward, over your shoulder.



7. Transfer the end you were already holding tight into your right hand. Reach behind you with your left hand and draw forward the end hanging over your shoulder. Pull the head edge tight.

Now, first pull the end in your right hand tight strand by strand, then do the same with that in your left hand.



8. Finally, tie the sling in a double knot under your child's bottom. The two ends go **over** your child's legs to form the knot.

Final step:

Lift the child's bottom up slightly with your left hand and use your right hand to grasp a fold of fabric from the side near your neck, then pull it over your shoulder.



Hip carry

(suitable when the child is able to sit up)





1. Drape the centre of the sling over one shoulder and tie the knot on your opposite hip.



2. Shift the knot round to the back and spread out the pouch in the sling in front of your tummy.



3. Holding your child on your free shoulder, slide her into the pouch and onto your hip. Pull the sling smoothly over your child's back and smooth down the fabric towards her bottom, tucking any remaining fabric in between her nappy and your hip.



4. To get a firmer hold, pull the head edge of the fabric under the side of the sling to cover your shoulder.



Wrap cross rucksack carry

"frog" on your back

(suitable when baby can sit up; advanced tying method)



1. Lift up your leg, lay the centre of the sling over your thigh and sit the child on it. Now pull the sling up smoothly over your child's back. Always use one hand to support your child while the other adjusts the pouch.



2. Lift baby up, using your left hand to support her back and head. Your baby's legs are in front of your left upper arm. Lift your child with her tummy against you onto your upper arm and push her bottom over your left shoulder.



3. Your child is now on your left shoulder. Both ends of the sling are still in your right hand. Your left hand continues to support baby. Your child's head is against your cheek. Reach over your right hand with your left hand and take both ends of the sling. Now reach over your left hand with your right hand and grasp the right-hand end ...



4. ... and lift it over your head onto your right shoulder, maintaining tension on the sling. Transfer the two ends to one hand.





5. Let your child slide into the proper position on your back, supporting her bottom with your free hand.





6. Reach through the two sides with your free hand, letting the fabric slide down your shoulder. Keep up the tension on the two ends so that your child is safely supported. Do the same on the other side.



7. Pull each end of the sling forward fold by fold until it is firm.



8. Tie a single knot in front of your chest, making sure not to lose any tension.



9. Pinch the lower end (here the left one) between your knees. Grasp the head edge of the upper end (here the right one), pull it backwards over your shoulder and pass it into your other hand. Use your other hand to gather the rest of the fabric on your shoulder.



10. Pull the head edge of the sling diagonally down your child's back to her knees. Now spread out the lower end smoothly across your child's back, with much of the fabric remaining on either side. Below your child's bottom the fabric is gathered together into a strip again.



11. This strip of fabric is pulled forward under your child's leg and pinned between your knees. Now take hold of the other end.



12. Do the same on the other side as described in Steps 9 to 11.



13. Pull the two ends tight strand by strand, starting with the end you first pulled over the child's back (here the right-hand side).









14. Tie a double knot. Push the knot at your chest into a position that is comfortable for you.

Rucksack carry

"frog" on your back

(suitable from the third month)



1. Place your baby in the centre of the sling, with the head edge of the fabric about two finger widths above her ears. Now gather the fabric firmly beneath your child's bottom, continuing upwards to the left and right side of your child.



2. Take the gathered ends of the sling in each hand at the level of your child's chin and ...



3. ... transfer the left end into your right hand. The two ends are now draped over to the right of your child, and you can gently swing the child in the sling.



4. Lift baby up, using your left hand to support her back and head. Your baby's legs are in front of your left upper arm.



5. Lift your child with her tummy against you onto your upper arm and push her bottom over your left shoulder.



6. Your child is now on your left shoulder. Both ends of the sling are still in your right hand. Your left hand continues to support baby. Your child's head is against your cheek.





7.a This keeps up the tension on the two ends so that your child is always safely supported.



7. Use your left hand to reach over your right hand and take both ends of the sling. Now use your right hand to reach over your left hand and grasp the right-hand strip of fabric, lift it over your head onto your shoulder, maintaining tension on the sling, and transfer the two ends into one hand.



8. Your left hand is free to support your child as she slides into the right position on your back. **Important:** lean <u>slightly</u> forward, push out your bottom and lift your head. Remain in this position until the knot is tied.



9. Reach round with one hand to the back of your neck, grasp the head edge of the sling and pull it forward.



10. Pull the head edge tight and transfer it to your other hand. Now grasp the fabric strand by strand and carefully pull it tight. Do the same on the other side.



Important: now pull the head edge and a handful of fabric firmly forward again.

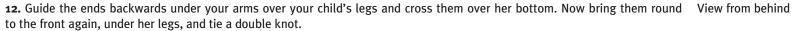


11. Spread the fabric to form nice wide straps on your shoulders. Twist each end twice at about waist height.













Tip: if you would like a chest strap for this tying method, you can simply join the shoulder straps with a cloth (here a Storchenwiege® doll's sling).



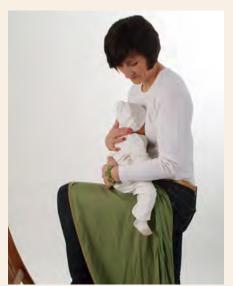
Tip: The pouch holding the child should be pulled down to her knees on either side and tucked under the end of the sling.





To **undo** the child, loosen the knots, pressing your arms firmly against your body, to keep your child firmly supported in the sling. Next, take the straps on your shoulders in your hands, pass them into your right hand and slide your child into your arms.

Another way to place the child in the rucksack carry.









Lift up your leg, lay the centre of the sling over your thigh and sit the child on it. Now pull the sling up smoothly over your child's back until it is about two finger widths above her ears. Always use one hand to support the child while the other adjusts the pouch.

Now continue from Step 4 above.

Storchenwiege®





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