



Instructions for the use of the
CLA Nursing Doll
in natural size

www.coburger-lehrmittelanstalt.de

CLA

Nursing Doll
in natural size

■ Our ideal, life-like and universal doll for all training applications in nursing and geriatric care was developed in co-operation with the Federal Centre for Health Education in Cologne.



■ The greatest care was taken to develop a life-like, functional model that is easy to maintain and extremely durable.

■ The doll is 178 cm tall and weighs approx. 23 kg.

■ It has got a robust joint mechanism that allows virtually all natural movements.

■ The head and limbs can be removed from the torso by means of simple screw attachments.

■ There are openings for PEG catheterisation and supra-pubic bladder puncture.

■ The male and female genitalia are interchangeable as a unit. Furthermore, all inter-

nal training organs (eyes, set of teeth, lung balloons, stomach and bowel unit) can be easily removed.

■ Intensive discussions with professional training and medical schools lead to continuous improvements. New developments take into account the current state of education.

■ Furthermore, the standard injection points (upper arm, buttocks, and thighs) are fitted with injection pads, and in the antecubital fossa, there are two three-dimensional veins for infusion and injection training.

■ The doll is completely made from a special plastic using a particular manufacturing technique. This leads to stability, water resistance, and a surface that is pleasant to touch.

■ Special instructions for use are provided under each training option in the detailed instruction manual.

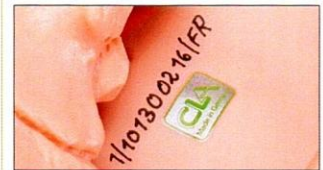
■ Each CLA Nursing Doll is marked with a serial number inside the right side of the thorax as well as inside the lower part of the body (area of the sacrum).

Please make sure you quote the complete number for any service enquiries or when ordering replacements:

**CLA 1
10486.01.19/FR**



Entry inside the chest



Entry inside the lower part of the body

■ We offer a full 2-year guarantee on all CLA Nursing Dolls, subject to proper use.

■ On request, CLA will provide services and guarantees the possibility of corrective maintenance even after decades.

■ Changes based on technical and practice-relevant improvements reserved.





CLA 3 Nursing Doll

Nursing Doll suitable for geriatric care, in natural size
 Comprising the following component parts: removable head, exchangeable eyes, set of teeth and tracheostomy, thorax with chest cover and movable arms, injection pads in the arms, buttocks and thighs, lower extremities (removable lower legs and feet through screw attachment), lower part of the body with abdominal cover and external female genitalia. Length 178 cm, weight approx. 20 kg.



CLA 1 Nursing Doll

(standard version) in natural size
 Comprising the following component parts: removable head, exchangeable eyes, set of teeth and tracheostomy, thorax with chest cover and movable arms with infusion and injection pads, lower part of the body with abdominal cover and stoma abdominal cover, injection pads in the buttocks, flexibly mounted legs with injection pads in the thigh, lung balloons, stomach, bowel unit, male and female genitalia with rectum and bladder that can be taken apart. Length 178 cm, weight approx. 23 kg.



CLA 2 Nursing Doll

(extended standard version) in natural size, like CLA 1, but with additional male genitalia with enlarged urinary bladder (capacity: approx. 2 l) and sealable lung balloons (for cleaning). Length 178 cm. Weight approx. 23.5 kg.

<p>Cover for port system CLA 205</p> 	<p>Abdominal cover with colostomy and subcutaneous injection pad CLA 411/1</p> 	<p>Valve installation kit for SUP/PEG/Stomach CLA 433/1 CLA 220/1 CLA 220/4</p> 	<p>Right lower leg with 4 ulcus cruris inserts CLA 530/1</p> 
<p>Stomach CLA 220 ASM</p> 	<p>Subcutaneous injection pad CLA 411/2</p> 	<p>Male genitalia with movable foreskin CLA 430/5</p> 	
<p>Female chest cover CLA 231</p> 	<p>Abdominal cover with 5-piece stoma set CLA 411/5 comprising 5 parts: oval (normal), retracted form, prolapse, erythema, and double-barrelled stoma; interchangeable via plug connections</p> 	<p>Lower leg stump with redness, right CLA 502</p> 	<p>Right lower leg with ulcus cruris insert CLA 530/2</p> 
<p>Lower part of the body with decubitus CLA 400/1</p> 	<p>Set of stomas CLA 411/6 (If interested, a pre-existing abdominal cover CLA 411, CLA 411/1 or CLA 412 must be sent in)</p> 	<p>Wound pad with suture and Redon drain suitable for right thigh CLA 511/1</p> 	<p>Right foot with decubitus and malum perforans CLA 531/1</p> 
<p>Abdominal cover, with PEG opening CLA 410/1</p> 	<p>Abdominal cover with 5 different stoma inserts and subcutaneous injection pad CLA 411/7</p> 		<p>Left foot with decubitus CLA 534/1</p> 

The internal and external surface of the CLA Nursing Doll does not require any particular maintenance. It is sufficient to clean it with water or a soap solution, as the case may be, if it is stained or after use. The same holds true for the practice parts.

An exception are the joint connections. It is expedient to thinly spray them with the included silicone oil after each cleaning and from time to time, in order to achieve maximum gliding properties.

At the hip joint, make sure to also spray the part of the thigh that is covered by the leg cuff by lifting the latter.

Treat the eye sockets, the nasopharyngeal zone, the oesophagus, the trachea, the urethra, and the rectum in the same way with the silicone oil. Detailed information can be found with each training option.

The joint surface on the inside of the neck should also be treated with the included talcum powder. If the head is detached from the torso, the underside of the head as well as the parts of the neck that remain on the torso should be rubbed thoroughly with talcum powder.

In order to maintain and clean them, the head (with the nasopharyngeal zone, the trachea, the oesophagus) and the limbs can be detached from the torso by means of screw attachments. The different organ parts can be separated and linked via screw attachments and plug caps. In order to maintain them in a fully functional state, they should be lubricated very thinly with the included Vaseline, especially every time after they have been cleaned.

Plaster residues are removed with cleaning solvent or alcohol; do not use any iodine or iodine substitutes.

Use nothing but pencil for any markings - traces of crayons, ballpoint pens, ink pencils, and any other coloured solutions can not be removed.

Particulars and precise instructions are illustrated at each description of the training applications and must be observed in every case.

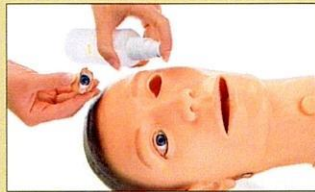
Summary of maintenance instructions:

Check list 'Silicone' page 7

Check list 'Talcum' page 8

Check list 'Vaseline' page 9

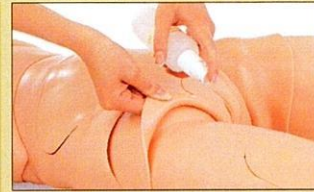




1) Eye lids and eye sockets



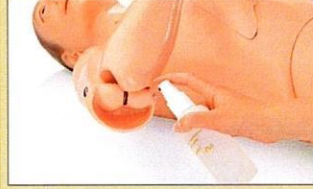
5) Shoulder joint



9) Hip joint (lift the plastic cover = fascia lata)



2) Oral cavity, nasopharyngeal zone, oesophagus, trachea (spray through the nose, from the inside)



6) Elbow joint



10) Knee joint



3) Tracheotomy



7) Wrist



11) Ankle joint



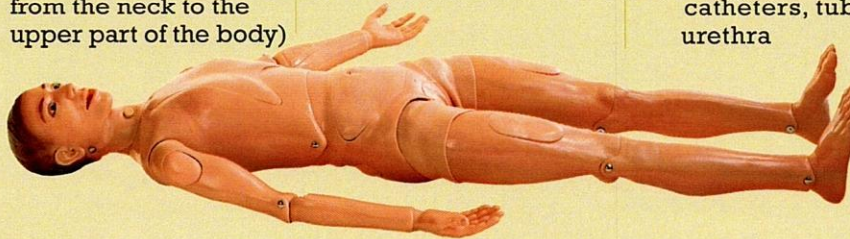
4) Neck joint (connection from the neck to the upper part of the body)



8) Waist



12) Cannulas, probes, catheters, tubes, urethra



Maintenance / check list for talcum

(sprinkle on talcum powder thinly and rub it in)



1) Underside of the head



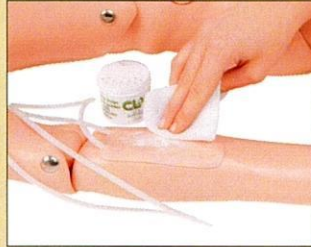
3) Inside of the injection pads with foam inserts



6) Surface of all doll parts after washing exercises



2) Upper neck area



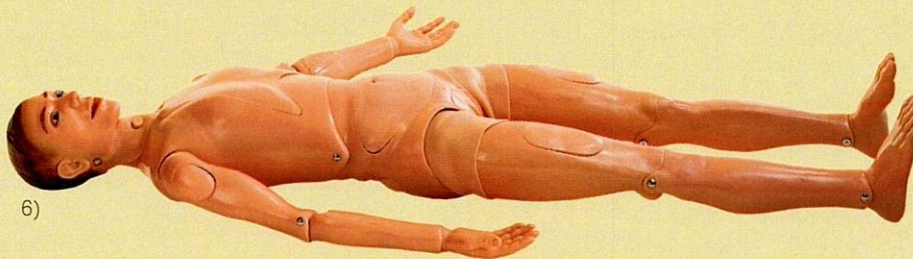
4) Infusion pad surface



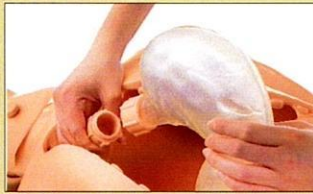
7) Mouth area



5) Trachea and lung balloon connection to the trachea



6)



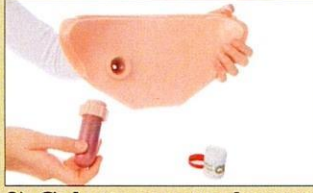
1) Connection of the oesophagus to the stomach



5) Connection of the rectum to the genitalia (male)



9) Urinary bladder seal



2) Colostomy attachment in the abdominal cover



6) Rectum valve



10) Urinary bladder to urethra (male)



3) Connection of the rectum to the bowel unit



7) Connection of the rectum to the genitalia (female)



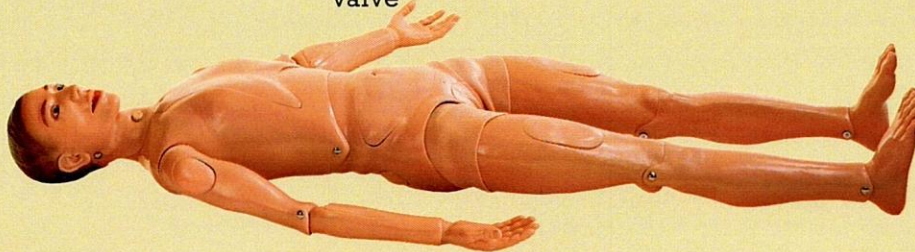
11) Urinary bladder to urethra (female)



4) Bowel unit seal



8) Urinary bladder valve



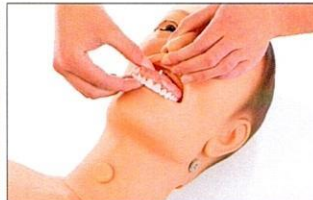
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1. General nursing

1.1 Daily personal hygiene

Critically ill people must be washed from head to toe every day. This puts the patient under great strain. In order to keep that strain to a minimum, the necessary positioning, manipulations, and sequences can be practised on the doll without any limitations.

It is only crucial to dry the doll well at the end. In oral hygiene, the oral cavity should be cleaned thoroughly. For that, the set of teeth can be removed and put back in easily, like with the maintenance of the prostheses.



Inserting the set of teeth

Head and facial bones are true-to-life reproductions. Therefore, the mandible allows all possible movements as well.

1.2 Bedding the patient, laundry change

If the patient is can not leave the bed, bedding and laundry change can be as easily demonstrated on the doll as transferring the patient to another bed, lifting, and carrying.



Practising personal hygiene

Maintenance

After practising the washing from head to toe, the joints should be thinly sprayed with the included silicone spray, in order to prevent friction.

If there has been too much friction in the hip joint, which is covered by plastic straps, this can be easily remedied by spraying it lightly with the included silicone spray.

1.3 Preventing bedsores (decubitus)

In case of prolonged bed rest and immobility of the patient for various reasons, difficult-to-heal pressure sores can easily develop when consistent pressure is applied to an area of skin.

All the necessary preventive and prophylactic measures can be demonstrated and practised.

Special equipment

Lower part of the body with decubitus

CLA 400/1



Left foot with decubitus

CLA 534/1



1.4 Handling of diseased limbs

Diseased limbs often have to be moved during bandaging, change of dressing, transfer of the patient to another bed and positioning of the patient.

The necessary manipulations must be precise and certain, in order to avoid causing the patient unnecessary pain. Sitting up, standing up, and positioning the patient correctly for food intake (eating or handing food) is equally important.

2. Specific care and therapy measures

2.1 Hydrotherapeutic measures: poulitices, cataplasms/packs/compresses

If hydrotherapeutic measures are practised, the only thing that must be observed when training on the doll is that the water temperature is not too high (not above 45°C) and that the doll is dried well afterwards and sprayed with a very thin mist of the silicone oil. For training purposes, linseed, lemon, quark or the like can be used for poulitices and packs/compresses. Staining substances should not be used. In case of hot packs/compresses and dry heat application (hot water bottle), temperatures should not exceed 40°C. In case of dry cold application such as gel packs, ice packs, there are no restrictions.

2.2 Bandages and dressings

The doll is ideal to practise applying dressings and putting on bandages. There are only restrictions concerning certain materials (plaster of Paris, zinc paste).

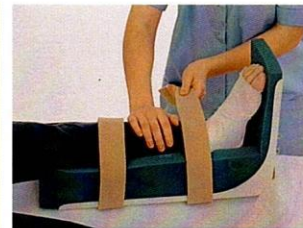
The following can be practised without any limitations: Positioning on positioning apparatuses and splint dressings. Wire extensions are not possible



Wound care on the amputation stump

Special equipment

Especially the possibilities to practise stump care should be highlighted, because the individual extremities can be quickly detached via screw attachments, as already mentioned.



Positioning and care



Taking off / attaching the amputation stump

Maintenance

Plaster residue can be easily removed with cleaning solvent or alcohol. Iodine and agents containing iodine should be avoided.

2.3 Inhalation / administration of oxygen

Simple vapour baths, inhalers, or aerosol inhalers are used for inhalation. In this context, the type of positioning and the correct setup of the appliances and putting on the mouthpieces, face masks, etc., respectively, are more important than handling the appliances when practising with the doll.

In case of an oxygen deficiency, the use of special face masks, O₂-probes, nose catheters, and oxygen funnels can be demonstrated using the doll.

2.4 Intubation and tracheostomy care / endotracheal suctioning

2.4.1 Intubation

The doll provides opportunities to practise care within the framework of intubation (oro-tracheal or nasotracheal), such as fastening the tube, controlling the cuff pressure, care of mouth and nose, as well as endotracheal suctioning. Furthermore, there is the option to assist with intubation as well as to practise bag ventilation. When practising ventilation, the stomach must be detached from the oesophagus in order to prevent the stomach from being inflated. There is a screw cap for the oesophagus on the left inside the thorax.

The lung balloons should be connected to the right and the left bronchus, respectively.



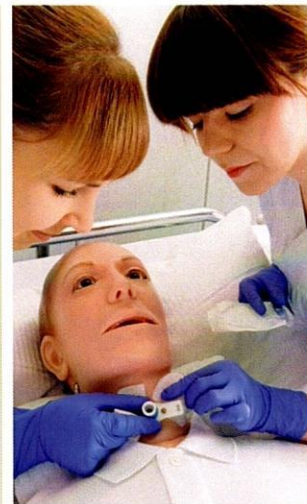
Attaching the lung balloons

Observing hygiene requirements, further ventilation options are: Mouth-to-mouth resuscitation and mouth-to-nose resuscitation. Cardiac massage is not possible.

2.4.2 Tracheostomy care / changing tracheal cannulas

In preparation of the tracheostomy care, the tracheal cannula is inserted into the pre-existing opening (remove the tracheostomy cover) with the aid of silicone spray. Tracheal cannulas with cuffs can be inserted as well. They are fixed in place via a tracheal cannula strap.

Demonstrating and practising skin care. Dressing change on the tracheostomy as well as assistance with changing the tracheal cannula are possible.



Tracheostomy care

Maintenance

When the special plastic used for the Nursing Doll comes into contact with the same or a similar kind of plastic, as is the case when e.g. plastic cannulas are inserted, this leads to great frictional resistance. The respective parts, such as the oral and pharyngeal cavity and the probe that is to be inserted, can be treated with the included silicone oil in order to achieve the required gliding properties.

2.4.3

Endotracheal suctioning

Further preparation of the Nursing Doll is required for the training of endotracheal suctioning via the tracheal cannula.

The two lungs are removed and the openings of the main bronchia are shut with a plug each.

The oesophagus also has to be shut using the seal that is in the thorax. 'Mucous secretion' can be poured in via the tracheal cannula (e.g. liquid soap with water).

With the aid of portable suction apparatuses, real-life handling of the endotracheal suctioning can be demonstrated and practised.

Maintenance

Following the demonstration / practice of endotracheal suctioning, any residual liquid in the bronchia and possibly in the oesophagus should be drained by opening the seals, and caught in a cloth. The main bronchia also need to be air-dried. Do not use any staining substances for the skin care or for the disinfection of the tracheostomy.

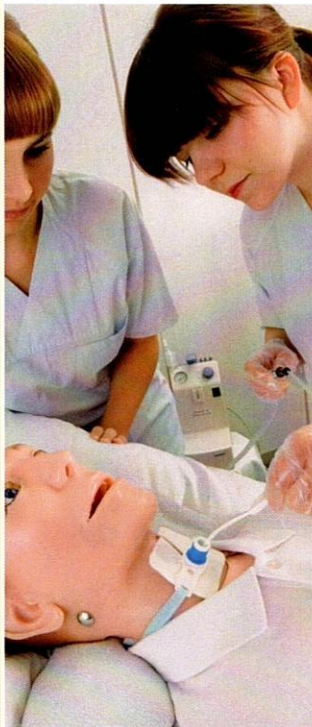
Special equipment

2.5 Treatment of chronic wounds (decubitus / diabetic foot / ulcer cruris)

2.5.1 Chronic wounds

The Nursing Doll provides different wound treatment options.

Based on the display of the wound, wound anamneses can be obtained, the stages of decubitus and ulcer cruris or changes to the diabetic foot can be described, and adequate wound treatments can be inferred. The different wound dressings/bandages can be used for wound treatment, according to the phases of wound healing. Staining wound dressings and solutions should not be used with the Nursing Doll.



Endotracheal suctioning

Special equipment

CLA 531/1



Wound treatment following amputation of the 2nd and 3rd toe.

**Special equipment
CLA 531/1**

**Diabetic foot (right)
with malum perforans,
decubitus heel, onychomycosis of the toe nails
as well as necrosis of
the 2nd and 3rd toe**

The right foot of the present model for the Nursing Doll shows the typical late complications of diabetes mellitus. One common complication of the diabetic foot is the **malum perforans**. The ball of the foot shows the typical formation of callosities through acrokeratosis with transition to ulcer. On the model, the pressure on the foot is visible and palpable through the acrokeratosis of the skin surface, reaching to the necrotic toes as well. The dry, slightly cracked and scaly callosity is also clearly visible on the ball of the foot.

The stage 2 decubitus ulcer on the heel. The representation corresponds to the characteristic features of the decubitus. Partial destruction of the epidermis is shown as a flat, open ulcer with a red and partly pink wound bed with fibrin-like deposits. The rim of the decubitus is shown realistically as a dry, scaly dermis with cracks on the rim of the ulcer. The dryness of the skin in the area of the heel is easy to feel by touching it. The skin areas around the decubitus indicate progressing skin changes with redness and slightly livid discolourations.

The onychomycosis of the toe nails with typical yellowish discoloration and structural change of the body of the nail can be part of the characteristics of the diabetic foot. On the right hallux in particular, the inflammatory changes on the nail fold, nail wall, and nail matrix are clearly visible. The surface of the nail plate is rough and slightly 'crumbly'; few dark colourings are visible.

On the diabetic foot, the skin areas surrounding the toes are shown as dry, scaly, and with a slight redness on the top side as well as on the bottom side of the toes.

Diabetic gangrene / necrosis of the 2nd and 3rd toe

The flaky, leathery, dry surface of the toes conveys the extent of the tissue damage. The demarcation of gangrene/necrosis to the skin is indicated by a reddish line, especially on the top side of the toes. The plug connection of the necrotic toes allows for a chronic wound to be treated after they have been removed (amputation).

With the help of the model of the foot, the complex of problems of the diabetic food syndrome can be conveyed realistically in the care area (patient care / geriatric care...). Based on the display of the wound, wound anamneses can be obtained, changes to the diabetic foot can be described, and adequate wound treatments can be inferred. The different wound dressings/bandages for wound treatment can be deduced. Staining wound dressings and solutions should not be used with the Nursing Doll.



Sole of the foot

disassembled

CLA 531/1

Special equipment

CLA 530/1

Right lower leg with 4 ulcus cruris inserts

The present model for the CLA Nursing Doll serves as an addition for the observation and treatment of chronic wounds. Due to the exchangeable wound pads, it is possible to assess the wounds in practical lessons, following the usual staging (according to Widmer, Hach, and the international CEAP classification, respectively).

In practice, the differentiated anamnesis, description, and treatment of wounds are important.

UC1:

Early stages of atrophy

The wound pad shows dilated, superficial veins, especially in the peripheral region of the developing skin alteration. The dry skin is shown by means of fine scaling of the skin. The beginning atrophy of the skin as well as a redness without sharply defined edges is clearly visible.

UC2:

Progressing skin alterations with loss of substance

The wound pad shows the progressing skin alterations with loss of substance of the skin (several small, open skin defects) as well as a lamella-like scaling of the skin. There is a bluish pigmentation and in part depigmentation of the skin in the wound area.

UC3:

Pronounced loss of substance with fibrin layers

The wound pad demonstrates a pronounced loss of substance of the skin with fibrin layers. The wound defect is surrounded by irregular and raised wound edges. There is some exudation in the wound area.

UC4:

Pronounced loss of substance with strongly yellowish, smeary fibrin layer

Besides the pronounced loss of substance of the skin, the wound pad demonstrates a strongly yellowish, smeary fibrin layer as well as blackish, necrotic changes, especially around the edge of the wound. Increased exudation of the wound area is visible.

The individual wound inserts can be exchanged easily and fit perfectly into the lower leg. The different wound dressings/bandages can be used for wound treatment. Staining wound dressings and solutions should not be used.

The wound pad is on the outside of the right lower leg. In case of a ulcus cruris that is purely caused by a venous disorder, it is often the area around the ankle or more the inside of the lower leg. In case of other causes, e.g. ulcus cruris caused by trauma, it can also be on the outside. There is also the possibility of a cuff-like ulcus cruris.

Maintenance

Following demonstration and practice, the wound dressings should be removed promptly; any residue must be removed completely. Use water to clean the wounds and wound pads.

Advice regarding the exchangeable wound pads



Removing (narrow side first)



Inserting (wide side first)

Special equipment

Right lower leg with 4 ulcus cruris inserts

CLA 530/1



Special equipment
2.5.2 Surgical wound treatment / wound drainage / changing surgical drains

There is the option to replace the injection pad with a wound pad on the right thigh of the Nursing Doll.

The present wound pad is an additional option to demonstrate and practise **surgical nursing in the form of dressing changes, suture removal, and changing drains**.

The wound pad shows a wound with reddened wound edge. It is possible to apply a suture. The small markings allow for an excellent application of the suture and of dressing material.

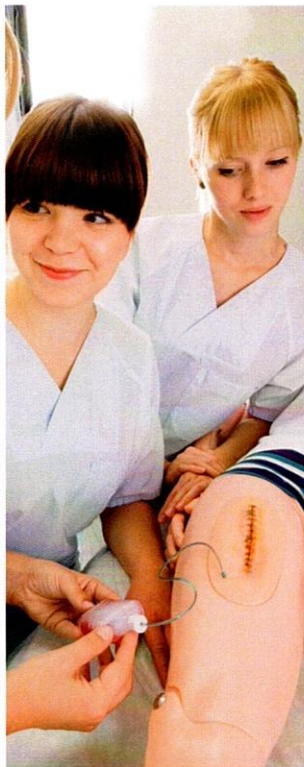
In addition to that, a drain can be inserted into the wound pad and drained from there. For that purpose, a mini piccolo wound drainage system is inserted via the reverse of the wound pad. Thanks to a foam cushion with a recess for the vessel, the drainage vessel can be fixed in place better. The mini piccolo drainage is filled with a liquid (choose the colour depending on the wound fluid, e.g. tea).

In order to guarantee the functionality of the wound drainage, the outer drainage system must have a vacuum.

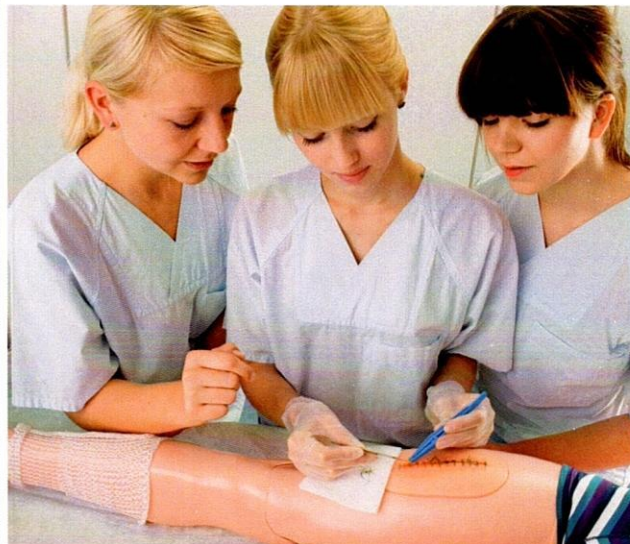
It is also possible to use a small high-vacuum wound drainage system. The Nursing Doll allows for realistic demonstration and practising of surgical wound treatment, which, however, requires some preparation time.

Maintenance

Use water to clean the wound pad after every exercise and to remove any residue. If it gets dirty, the foam should be rinsed and air dried. The mini piccolo drainage vessel must be cleaned of the wound fluid and be air dried.



Changing drains

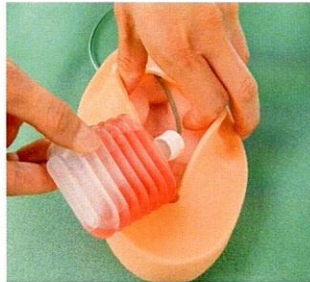


Suture removal

Tips for handling the wound pad with suture and Redon drain suitable for right thigh



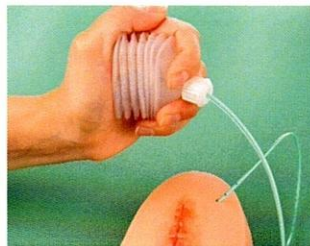
Applying the suture



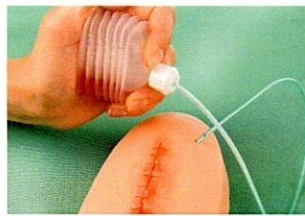
Inserting the filled piccolo drain

The external part of the wound drain can be easily passed through the predetermined opening on the wound pad and connected to a 2nd Redon drain.

The wound drain in the wound pad must be inserted into the filled piccolo drain and sealed tightly.

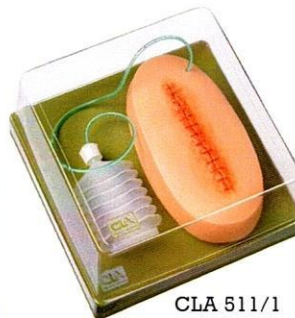


Vacuum build-up



Suctioning the wound fluid

After preparing the wound pad and the drainage, the wound pad must be inserted in the right thigh of the Nursing Doll and then the corresponding wound dressing has to be applied.



CLA 511/1



CLA 511/1 disassembled (without storage box)

2.6 Inserting feeding tubes / PEG care

2.6.1 Inserting feeding tubes

It is possible to insert an oral as well as a transnasal feeding tube into the Nursing Doll. For this, the stomach CLA 220 ASM or the stomach CLA 220 must be connected to the oesophagus.

Handling the insertion of the tube can be demonstrated and practised. Feeding can be done either via a bolus or via a feeding pump.

Maintenance

In order to ensure the gliding properties of the tube, mouth/nose and oesophagus should be treated with silicone spray. The stomach with the screw cap must also be treated with either silicone spray or Vaseline. The tube that is to be inserted should be coated with silicone spray. After the exercise, the fixing materials for the tube should be removed promptly, using cleaning solvent. The stomach should be thoroughly rinsed with water and air dried.

2.6.2 Gastrostoma care (PEG)

The opening for the PEG tube is in the left upper abdomen. In preparation of the demonstration and practice of the PEG maintenance as well as of the feeding, an original PEG tube must be inserted from the inside of the upper body out through the opening. Slightly moistening the tube with silicone makes pulling it through the opening easier. The tube will be fixed in place via the retaining plate. The end of the tube on the inside must be inserted into a collection container. (e.g. foil bag or the valve installation kit CLA 220/1), in order to collect any liquids and foodstuffs that have been administered via the PEG tube. When using a gastric tube / button, the tube must be inserted from the outside via the PEG opening to the inside.

It is possible to attach the PEG tube to a feeding pump. The entry point of the PEG equipment can be disinfected (e.g. Lavasept / no staining disinfectants) and bandaged with dressing material.

As an additional offer, special equipment **CLA 410/1 abdominal cover with PEG opening** at the Nursing Doll, plug inserts can be inserted into the PEG equipment, facilitating demonstrations of care-relevant situations, such as local infections at the PEG exit point or hypergranulation.



Attaching the PEG feeding pump

Maintenance

Plasters can leave some residue on the surface of the Nursing Doll. As soon as possible after the exercise, these residues should be removed with cleaning solvent. Following the exercise, the collection container should be removed and either cleaned or discarded (foil bag).



Cleaning the PEG entry point

2.7 Lavages

Fluids that are as close to body temperature as possible are injected into body cavities, with or without added medication. Staining additives should be avoided when practising on the doll.

2.7.1 Evacuation of stomach / gastric lavage

For the gastric lavage, the stomach with the screw cap CLA 220 should be connected to the oesophagus. For the gastric lavage, the patient should be slightly on his left side. The flushing fluid can leak from the model of the stomach CLA 220.

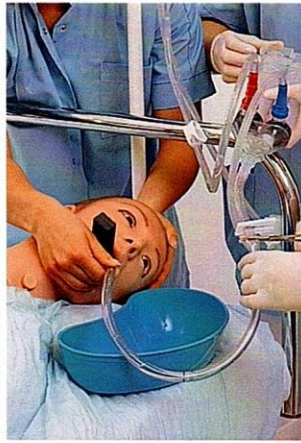


Screw on the stomach

Before that, the stomach is already filled with some liquid (e.g. tea). In preparation for the gastric lavage, the throat and the oesophagus as well as the stomach tube that is going to be inserted should be sprayed with a thin layer of silicone spray.

Special equipment

The valve closure of the stomach (CLA 220/4) must also be treated with silicone oil, so that the tube can pass the cardia easily.



Gastric lavage

Since the stomach tube is relatively thick and slightly rigid, it is possible that the eyes of the tube are not in the fluid inside the stomach and therefore nothing can come back. In that case, the position of the tube should be changed.

The gastric lavage can also be performed in a closed set as gastroenteral lavage. The stomach filling volume of 650 ml must be observed for the lavage.

2.7.2 Eye wash / administration of medication

For washes using the syringe / infusion set, the lids of the doll are spread apart applying a typical manipulation.

Eye drops, etc. are administered close to the inner corner of the eye via a pipette. Administering ointments can be practised as well. To clean it, the glass eye should be taken out of the eye socket.

For that purpose, it is taken out together with the upper and the lower eyelid, which serve as a mechanical aid at the same time.



Spraying the eye

Maintenance

The eye sockets in the skull and the eyelids are treated with silicone spray. After each cleaning, another thin layer of the silicone spray should be applied, so that the eyes can be inserted and taken out without any problems. If liquids have been used, make sure that the plastic parts are dried.

2.7.3 Ear irrigation, administration of medication

Use only water to clean the outer ear canal. The ear has been realistically recreated, but the middle and inner ear have not been modelled. Only water should be used as ear drops; after the exercise, the ear canals should be dried thoroughly using cotton wool.

2.8. Enemas (purgative enema / high enema / clyisma), colostomy

For that purpose, a rectal catheter, size Ch 25 or similar, is used exclusively for training purposes, because the valve in the rectum of the doll is set to that size.

The rectal catheter must be greased with Vaseline in order to achieve good gliding properties and the highest possible leak tightness of the valve. After the enema has flowed in (the maximum capacity of the bowel unit must not exceed 1.5 l), the catheter can be removed. The rectal catheter is to be inserted again to empty the rectum.

2.8.1 High enema

Besides purgative enemas, a high enema can be practised on the Nursing Doll as well. In preparation for the exercise, the bowel unit can already be filled with some liquid of contrasting colour to the flushing liquid (e.g. darker, non-staining tea). The warmed-up enema fluid runs in through the rectal catheter. Via the siphoning principle, the enema fluid can run back into the irrigator and shows a discolouration.



Practising high enema

2.8.2 Enema

It is a variation of the purgative enema. Finished products can be used if the attachments can pass the sphincter at the rectum.

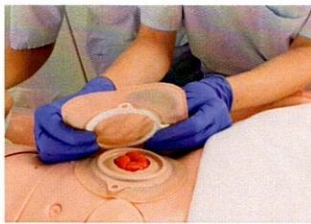
Maintenance

The mimicked sphincter at the rectum consists of tightly overlapping plastic lamellas. Before every exercise, these lamellas should be made pliable by either using a slightly moistened little finger or a rectal catheter that has been treated with silicone oil. In order to be able to do this easily, it is recommended to unscrew the rectum from the male and female genitalia, respectively.

Make sure that after the exercises, the organ parts are completely emptied and dry well. Only then can they be attached to the Nursing Doll or placed in the body cavities again, as the case may be. The rectum with its mimicked sphincter is a wear part that can be ordered again, once its full functionality is no longer guaranteed.

2.8.3 Stoma care / colostomy

For the colostomy care, the standard abdominal cover is to be exchanged for the one with a colostomy. If required, the 'filler plug' can be permanently attached to the stoma from the inside of the abdominal cover. It is possible to fill it with stool-like materials. Staining filling materials should not be used. Original stoma care and maintenance products can be used. Different stoma care situations can be demonstrated and practised by using the abdominal cover with the 5-piece stoma set (CLA 411/5).

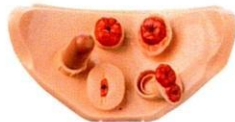


Attaching the stoma bag

Maintenance

After applying the stoma care products, the area around the stoma as well as the 'filler plug' must be thoroughly cleaned of any care product residue.

Special equipment



Storage of inserts

CLA 411/5
Abdominal cover with five different stoma inserts

CLA 411/6
Set of stomas



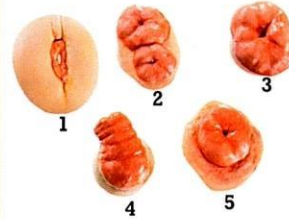
CLA 411/7
Abdominal cover with 5 different stoma inserts and subcutaneous injection pad

The present model offers the possibility to demonstrate and practise stoma care on the Nursing Doll with a practical orientation.

The five different, exchangeable stoma inserts facilitate the creation of different exercise and instruction situations in teaching nursing and paediatric nursing care. The model provides ideal possibilities, as the precisely fitting application of stoma care products is essential in stoma care.

To some extent, size, shape, and blood circulation of stomas can differ greatly between patients, so that the most common creations and changes of stomas, respectively, were chosen for the nursing model.

1. Colostomy
2. Double-barrelled stoma
3. Low-lying stoma
4. Stoma prolapse
5. Stoma with inflammation and clear redness of the area surrounding the stoma.



CLA 411/6

The colour of the stoma indicates good circulation. Due to the guide groove, the individual stomata can be inserted without any problems, and can be fixed in place on the inside of the abdominal cover via the screw connection with the intestinal appendage.

With the 'physiological stoma' and the inflamed stoma, it is possible to fill the collection bag with 'stool-like material' from the section of the bowel via the stoma. That way, the nursing care could be even more realistic.

The commercially available stoma products can be used on the Nursing Doll.

The space-saving storage of the stomas on the inside of the abdominal cover should be particularly noted. That way, all stomas are ready to hand for training purposes and for the storage of the inserts.

2.9 Catheterisation / bladder irrigation / suprapubic bladder drainage

2.9.1 Catheterisation (male/female)

The genitalia of the doll are completely interchangeable, which facilitates the practising of this important intervention and of the correct fastening of a permanent catheter without difficulty.

A valve made from plastic lamellas serves as closing mechanism of the bladder. The diameter of the urethra of 7 mm makes it necessary that only catheters up to a certain size can be used for practising. For both males and females, Nelaton single-use catheters can be used up to size Ch 18. Permanent catheters can be used up to size Ch 16. Permanent catheters with guide wire are easier to insert into the bladder.

The respective catheters should be coated with an ultra-thin layer of the included silicone oil. Catheter lubricants should not be used, as they tend to dry up over time.

The tip of the male and the female bladder, respectively, has got a sealable filling hole. The capacity is approx. 150 ml. Make sure that during the exercises, the bladder is filled to the brim and that the Nursing Doll is lifted up slightly in the waist (raised upper body).



The male and female genitalia are interchangeable as a unit



Greasing the urinary bladder valve with Vaseline

During catheterisation, the filling hole should remain open, so as to not create a vacuum. The bladder should always only be filled after the genitalia have been locked in position in the lesser pelvis using the two fixing attachments.

The male and female genitalia, respectively, are exchanged by undoing the fixing attachments once on the upper edge of the sacral bone and on the symphysis.

After that, the organs can be removed or inserted again through the orifice of the body in the lesser pelvis (between symphysis and coccyx).

Only with CLA 2:
For training purposes, the 2 l bladder can also be attached to the female urethra.

Special equipment

The male genitalia CLA 430/5 (movable foreskin) is particularly well suited for realistic demonstrations / training.

Important maintenance instructions for CLA 430/5
Male genitalia with bladder (capacity 150ml) and rectum with patent closure for connection to the bowel unit:

The penis must be lubricated with silicone oil before the foreskin is pulled back.



Spraying the movable foreskin

Maintenance

Before the training, the urinary bladder should be unscrewed from the male or the female urethra, as the case may be. This reveals the valve mechanism in the urinary bladder, which should always be lubricated before practising catheterisation with a catheter that has been treated with silicone oil.

After the training, it is recommended to keep the filling hole at the tip of the bladder unsealed in order to ensure it dries evenly.

The valve mechanism of the bladder is a wear part, which - if it no longer functions due to constant use - can be replaced by a new bladder, which can be reordered.



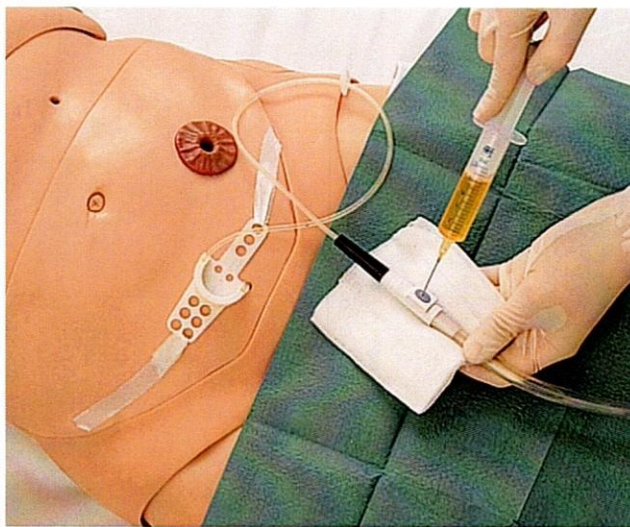
Catheterisation (male)



Catheterisation (female)



Catheterisation (male)



Suprapubic bladder drainage

2.9.2 Bladder irrigation

Here, the same principles apply as described for catheterisation. **Bladder capacity: approx. 150 ml. Single-use catheter up to size Ch 18, permanent catheter up to size Ch 16.**

During this exercise, the filling hole at the tip of the bladder should remain sealed.

2.9.3 Suprapubic bladder drainage

The abdominal cover with the colostomy is used for this therapy and care measure. Via the opening above the symphysis on the linea alba, access to the bladder is possible via a bladder puncture cannula or a suprapubic bladder catheter.

For demonstration purposes, the bladder should be filled with approx. 150 ml of liquid (e.g. chamomile tea / for advice on how to fill the bladder see catheterisation). All assistance and care measures can be simulated in a way that is relevant for practical applications (change of dressing on the suprapubic bladder catheter. Attaching urine drainage systems etc.).

Maintenance

Following the exercise, the bladder must be detached from its fixed connections. The remaining fluid must be discarded and the bladder must then be thoroughly flushed with water again. Afterwards, make sure it dries completely.

**2.10 Injections /
i.v. puncture / injection
infusion/transfusion
Central venous access
(port)**

**2.10.1
Injections (s.c./i.m.)**

The different injection techniques can be practised on the doll, with the exception of intracutaneous injections.

The standard injection points are fitted with injection pads (upper arm, thighs, buttocks, and stomach)



Injection into the thighs

In order to clean them, the pads are taken out of their plastic sleeve. They can then be squeezed and washed out and re-used as often as needed.

In order to assist with inserting the injection pads correctly, the initial letters in German, English, and French are engraved on the inner surface as follows:

**1. Injection pad,
right upper arm:**

R.O. = Rechter Oberarm
R.U.A. = Right Upper Arm
B.D. = Bras Droit



Inserting the upper arm injection pad

**2. Injection pad,
left upper arm:**

L.O. = Linker Oberarm
L.U.A. = Left Upper Arm
B.G. = Bras Gauche

**3. Injection pad, right
lower abdomen CLA
411/2**



**4. Injection pads at the
buttocks (intragluteal and
ventrogluteal)**

Due to the distinctive shapes of the two injection pads, marking is not necessary.



Inserting the injection pad into the buttocks - intragluteal



Inserting the injection pad into the buttocks - ventrogluteal

**5. Injection pad,
right thigh:**

R.O. = Rechter Oberschenkel
R.T. = Right Thigh
C.D. = Cuisse Droite



Inserting the thigh injection pad

**6. Injection pad,
left thigh:**

L.O. = Linker Oberschenkel
L.T. = Left Thigh
C.G. = Cuisse Gauche

2.10.2 Intravenous puncture/injection

In the antecubital fossa, there are three-dimensional, palpable and visible vein tubes, basically extending from the top of the infusion pad. That way, liquid can be injected into or extracted from the plastic veins.

If this does not need to be practised, these infusion pads can be replaced with ones without tubes but with appropriate covers. The Nursing Doll will be delivered with these already inserted, as the infusion pads with the tubes are often considered to be interfering during other exercises.

In preparation for demonstration / practising venipuncture and the 'taking of blood samples', the vein tubes must be linked to e.g. an intravenous bag via a miniature spike. The Y connector on the vein tubes is inserted into the syringe cone insert of the spike. The bag is to be placed above the doll. For a realistic representation, it is recommended to stain the liquid in the bag.

During the intravenous injection of medication, an intravenous bag (empty or only half full) can also be used as a collection container.

2.10.3 Infusion / transfusion

When demonstrating the s.c. infusion, attention should be paid to the fact that the receptacle pads only have got a limited capacity (upper arm, thigh, and possibly abdomen).

Infusions/transfusions can be demonstrated and practised. Pressure infusions and infusions via infusion devices are also possible.

When preparing the exercises, the vein tubes can also be connected to an intravenous bag (see 2.10.2) or they can be drained into a collection container.

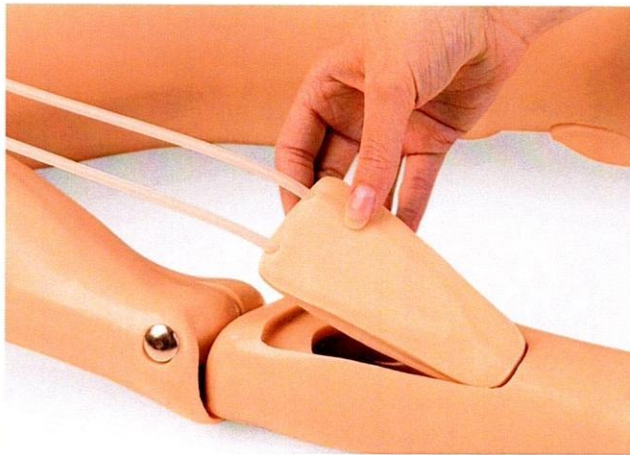
In order to assist with inserting the infusion pads correctly, the initial letters in German, English, and French are engraved on the inner surface as follows:

1. Infusion pad, right antecubital fossa:

- R.U. = Rechter Unterarm
- R.F. = Right Forearm
- A.D. = Avant-Bras Droit

2. Infusion pad, left antecubital fossa:

- L.U. = Linker Unterarm
- L.F. = Left Forearm
- A.G. = Avant-Bras Gauche



Inserting the infusion pad

2.10.4 Central venous access (port) Special equipment

The port is not included in the standard version of the doll.

Underneath the right clavicle of the Nursing Doll, there is a port for the central venous access. An original port system can be placed in the 'port bag' on the inside of the thorax and fastened there.

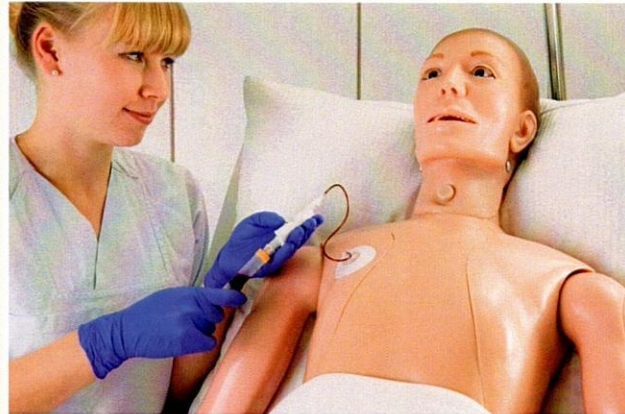
The central venous catheter is led into a container and fastened.

The following can be demonstrated / practised via port cannula:

- Accessing the port using the Huber Needle
- Taking blood samples at the central venous catheter
- Infusion therapy via infusion device
- Care around the central venous catheter



Inserting the port system cover



Practising taking blood samples via the port system



Connection to the infusion device

List of accessories and spare parts



CLA
Nursing Doll



CLA 100
Head with exchangeable eyes, ears with external auditory canal, removable set of teeth, tracheotomy, oesophagus and trachea with the main bronchia

CLA 100/1
Head with interchangeable eyes, ears with external auditory canal, removable set of teeth (magnetic), tracheotomy, oesophagus and trachea with the main bronchia



CLA 103
Head like CLA 100, but without tracheotomy and trachea with main bronchia

CLA 110
Pair of eyes with eyelids



CLA 111
Eyelids



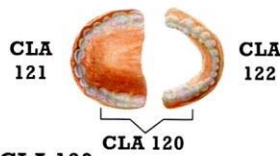
CLA 112
Eyelid, right



CLA 113
Eyelid, left



CLA 114
Glass eyes, 1 pair



CLA 120
Set of teeth, maxilla and mandible

CLA 121
Row of teeth for the maxilla

CLA 122
Row of teeth for the mandible



CLA 120/1
Set of teeth, maxilla and mandible, magnetic, suitable for CLA 100/1

CLA 121/1
Set of teeth for maxilla, magnetic, suitable for CLA 100/1

CLA 122/1
Set of teeth for mandible, magnetic, suitable for CLA 100/1

CLA 130
Seal of the tracheotomy opening



CLA 140
Screw attachment 'neck joint'



CLA 150 without illustration
Male wig

CLA 151 without illustration
Female wig



CLA 200
Upper part of the body with chest cover and screw attachment 'neck joint' and screw attachment 'waist'

CLA 201
Screw attachment 'waist', 1 pair

CLA 202
Screw attachment 'waist', individual



CLA 203
Plug cap, positive, closed, 1 piece



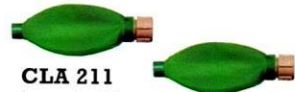
CLA 205
Cover for port system



CLA 210
Lung balloons, 1 pair



CLA 211
Lung balloons, sealable, 1 pair



CLA 220
Stomach with screw cap for the connection with the oesophagus

List of accessories and spare parts



CLA
Nursing Doll



CLA 220 ASM
Stomach with screw cap and additional seal



CLA 220/1 { **CLA 220/2**
CLA 220/3



CLA 220/1
Valve installation kit for PEG

CLA 220/2
Valve installation kit for PEG, seal component

CLA 220/3
Valve installation kit for PEG, puncture insert

CLA 220/4
Valve installation kit for stomach



CLA 230
Chest cover



CLA 231
Chest cover, female



CLA 300
Right upper arm with injection pad and screw attachment 'shoulder joint'



CLA 301
Right forearm with hand, infusion pad 'antecubital fossa' and screw attachment 'elbow joint'



CLA 301/1
Forearm, right



CLA 301/2
Hand, right



CLA 301/3
Screw attachment 'wrist', 1 pair



CLA 303
Left upper arm with injection pad and screw attachment 'shoulder joint'



CLA 304
Left forearm with hand, infusion pad 'antecubital fossa' and screw attachment 'elbow joint'



CLA 304/1
Forearm, left



CLA 304/2
Hand, left



CLA 306
CLA 305
CLA 305
Screw attachment 'shoulder joint', 1 pair

CLA 306
Screw attachment 'shoulder joint', individual



CLA 307
Screw attachment 'elbow joint', 1 pair



CLA 308
Screw attachment 'elbow joint', individual

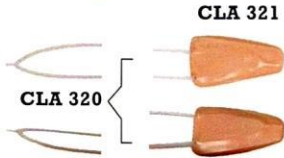


CLA 311 **CLA 312**
CLA 310
CLA 310
Injection pad 'upper arm', 1 pair; right and left upper arm

CLA 311
Injection pad 'upper arm', right

CLA 312
Injection pad 'upper arm', left

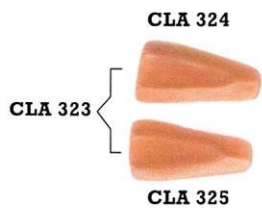
**CLA -
Nursing Doll**



CLA 320
Infusion pad 'antecubital fossa with veins', 1 pair; right and left forearm

CLA 321
Infusion pad 'antecubital fossa with veins', right

CLA 322
Infusion pad 'antecubital fossa with veins', left



CLA 323
Cover for the opening where the infusion pads are inserted in the 'antecubital fossa with veins'. 1 pair

CLA 324
Cover for the opening where the infusion pad is inserted in the 'antecubital fossa with veins', right

CLA 325
Cover for the opening where the infusion pad is inserted in the 'antecubital fossa with veins', left



CLA 400
Lower part of the body with abdominal cover and abdominal cover with colostomy



CLA 400/1
Lower part of the body with decubitus

CLA 400/2
Decubitus installation kit



CLA 401
Fascia lata, right and left, installation kit
= CLA 402 + CLA 403



CLA 402
Fascia lata, right installation kit

CLA 403
Fascia lata, left installation kit



CLA 404
Fascia lata, right



CLA 405
Fascia lata, left



CLA 406
Mounting ring, right



CLA 407
Mounting ring, left



CLA 408
Plastic screw M 6x60 with plastic knurled nut, 1 piece

**CLA -
Nursing Doll**

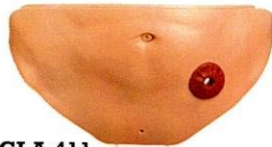
CLA 409
Plastic screw M 6x30 with
plastic knurled nut, 1 piece



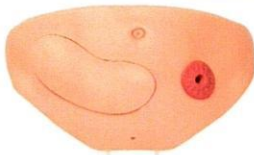
CLA 410
Abdominal cover



CLA 410/1
Abdominal cover,
with PEG opening



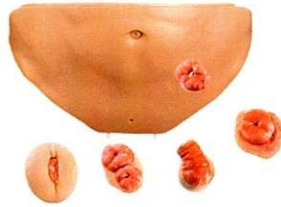
CLA 411
Abdominal cover with
colostomy



CLA 411/1
Abdominal cover with colostomy
and diabetes injection pad



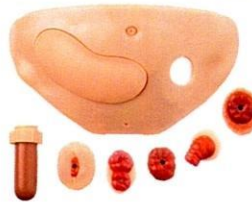
CLA 411/2
Diabetes injection pad



CLA 411/5
Abdominal cover with five
different stoma inserts



CLA 411/6
Set of stomas



CLA 411/7
Abdominal cover with 5
different stoma inserts and
diabetes injection pad



CLA 412
Abdominal cover with colo-
stomy and filling hole for the
2 l bladder (only CLA 431)



CLA 413
Colostomy, lower part with
screw cap



CLA 421
Bowel unit with plug cap
for the connection with the
rectum



CLA 422
Rubber seal, 1 piece



CLA 423
Screw cap, negative,
closed, 1 piece



CLA 424
Screw cap, positive, open,
1 piece



CLA 425
Screw cap, positive, closed,
1 piece



CLA 426
Screw cap, negative, open,
1 piece



CLA 430
Male genitalia with bladder
(capacity: 150 ml) and rectum
with plug cap for the connec-
tion with the bowel unit

List of accessories and spare parts

**CLA -
Nursing Doll**



CLA 430/1
Male genitalia without bladder (CLA 433) and without rectum (CLA 438)



CLA 430/2
Male genitalia with bladder (CLA 433) and without rectum (CLA 438)



CLA 430/5
Male genitalia with movable foreskin, with bladder (capacity: 150 ml) and rectum with plug cap for the connection with the bowel unit



CLA 430/5-1
Male genitalia with movable foreskin, without bladder (CLA 433) and without rectum (CLA 438) List of accessories and spare parts

CLA 430/5-S
without illustration
Male genitalia with movable foreskin, with bladder (capacity: 2 l) and rectum with plug cap for the connection with the bowel unit



CLA 431
Male genitalia with bladder (capacity: 2 l) and rectum with plug cap for the connection with the rectum



CLA 432
Urinary bladder (capacity: 2 l) with valve and suitable for CLA 431



CLA 432/5
Urinary bladder (capacity: 2 l) with special valve and suitable for CLA 430/5



CLA 433
Urinary bladder, male (capacity: 150 ml) with valve and sealable filling hole and suitable for CLA 430

CLA 433/1
Urinary bladder, female (capacity: 150 ml) with valve and suitable for CLA 440



CLA 433/5
Urinary bladder, male (capacity: 150 ml) with special valve and suitable for CLA 430/5



CLA 435
Nelaton single-use catheter, Ch 16, length 40 cm



CLA 436
Permanent catheter, man, Ch 14 optional Ch 16



CLA 437
Rectal catheter Ch 25, length 40 cm



CLA 438
Rectum with plug cap for the connection with the bowel unit (suitable for CLA 430, CLA 431 + CLA 430/5)



**CLA -
Nursing Doll**



CLA 439
External male genitalia
suitable for CLA 3



CLA 440
Female genitalia with
urinary bladder (capacity:
150 ml), vagina with uterus
and rectum with plug cap
for the connection with the
bowel unit



CLA 440/1
Female genitalia with vagina
and uterus; without urinary
bladder (CLA 433) and wit-
hout rectum (CLA 443)



CLA 440/2
Female genitalia with urinary
bladder (capacity: 150 ml),
vagina with uterus, without
rectum



CLA 441
Single-use catheter for
women, Ch 16, length: 18 cm



CLA 443
Rectum with plug cap for the
connection with the bowel
unit, suitable for CLA 440



CLA 444
Bladder cover, 1 piece



CLA 445
External female genitalia
suitable for CLA 3

CLA 451
Injection pad 'buttocks'
intragluteal, right

CLA 452
Injection pad 'buttocks'
ventrogluteal, left



CLA 455

CLA 455
Injection pad 'buttocks',
1 pair; intragluteal right and
ventrogluteal left



CLA 500
Right thigh with injection
pad and screw attachment
'hip joint'

**CLA -
Nursing Doll**



CLA 501
Right lower leg with foot
and screw attachment
'knee joint''



CLA 502
Lower leg amputation stump
with redness, right



CLA 503
Left thigh with injection
pad and screw attachment
'hip joint'



CLA 504
Left lower leg with foot
and screw attachment
'knee joint'



CLA 505
Screw attachment 'hip joint',
1 pair

CLA 506
Screw attachment 'hip joint',
individual



CLA 507
Fastening nut, metal M 6,
1 piece



CLA 508
Knurled nut, plastic M 6,
1 piece

CLA 511

CLA 512

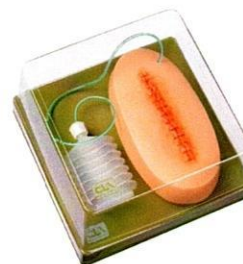


CLA 510

CLA 510
Injection pad 'thigh', 1 pair;
right and left thigh

CLA 511
Injection pad 'thigh', right

CLA 512
Injection pad 'thigh', left



CLA 511/1
Wound pad with suture and
Redon drain suitable for right
thigh



CLA 520
Screw attachment 'knee
joint''

CLA 521
Screw attachment 'knee
joint', individual

**CLA -
Nursing Doll**



CLA 522
Knurled nut, metal M 6,
1 piece



CLA 530
Lower leg, right



CLA 530/1
Right lower leg with 4 ulcus
cruris inserts



CLA 530/2
Right lower leg with ulcus
cruris insert 1: Early stages
of atrophy



CLA 530/3
Right lower leg without ulcus
cruris insert



CLA 530/4
Ulcus cruris insert 1:
Early stages of atrophy

CLA 530/5
Ulcus cruris insert 2:
Progressing skin alterations
with loss of substance

CLA 530/6
Ulcus cruris insert 3:
Pronounced loss of sub-
stance with fibrin layers

CLA 530/7
Ulcus cruris insert 4:
Pronounced loss of substance
with strongly yellowish,
smearly fibrin layer



CLA 530/8
Storage box for ulcus cruris
inserts



CLA 531
Foot, right



CLA 531/1
Diabetic foot (right) with
malum perforans, decubitus
heel, onychomycosis of the
toe nails as well as necrosis
of the 2nd and 3rd toe

CLA 531/2



CLA 531/2
Diabetic foot, right

CLA 531/3



CLA 531/3
Necrosis of the 2nd and 3rd
toe

CLA 1
Nursing Doll -
partly disassembled with the order numbers
of the component parts

